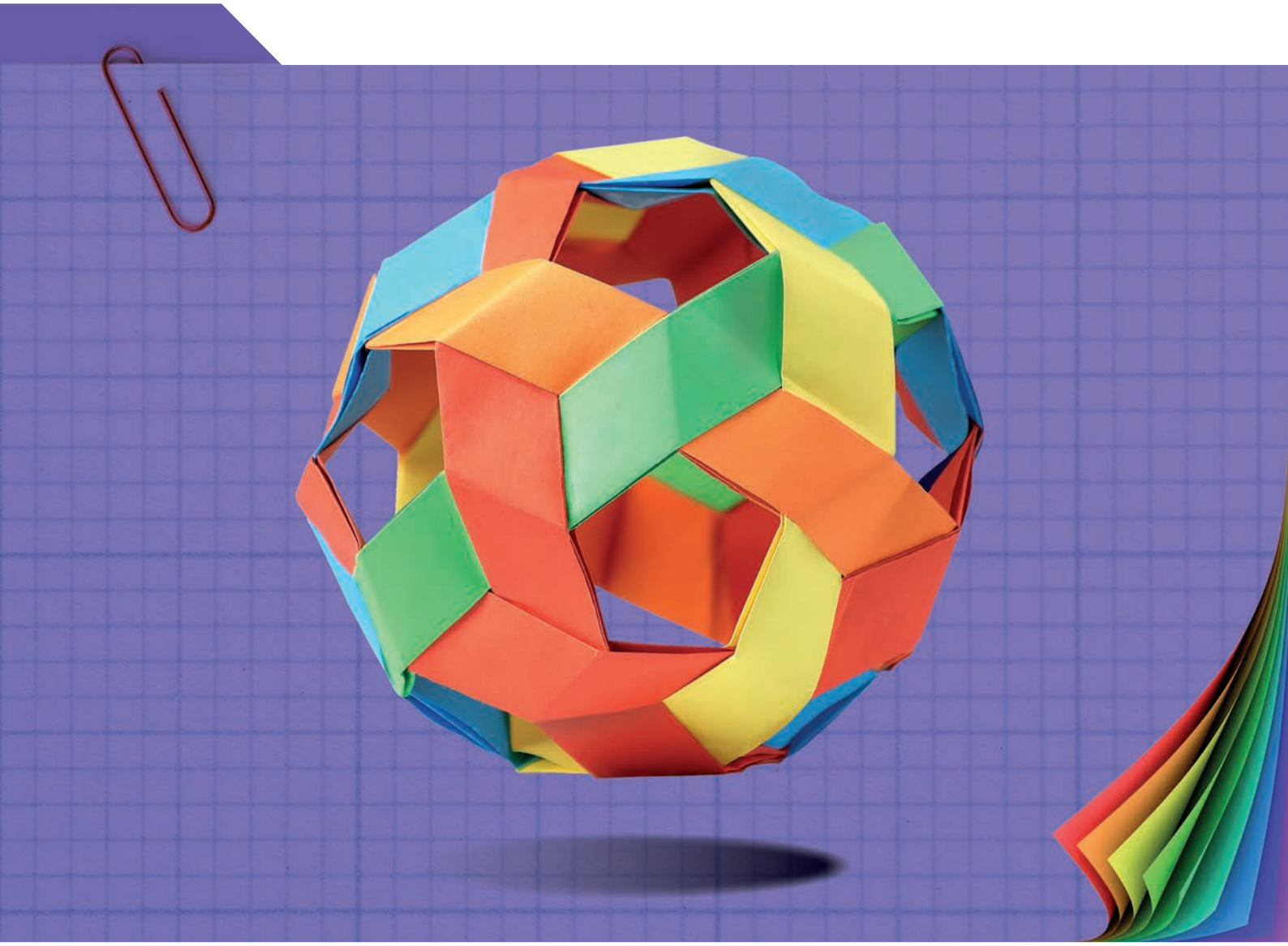
Implementing Education Policies

Scotland's Curriculum for Excellence

INTO THE FUTURE



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BETTER POLICIES FOR BETTER LIVES

Please cite this publication as:
OECD (2021), *Scotland's Curriculum for Excellence: Into the Future*, Implementing Education Policies, OECD Publishing, Paris, *https://doi.org/10.1787/bf624417-en*.

ISBN 978-92-64-34104-3 (print)
ISBN 978-92-64-47698-1 (pdf)

Implementing Education Policies
ISSN 2617-6572 (print)
ISSN 2617-6580 (online)

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Foreword

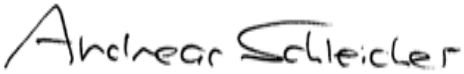
Scotland (United Kingdom) was among the first education systems to embrace the 21st century learning movement, when it reformed its curriculum policy in the early 2000s. Following a large-scale public debate, *Curriculum for Excellence* (CfE) was published in 2004 and would be developed over the subsequent years, before being phased into schools from 2010/2011 onwards. CfE aims for students to grow into successful learners, confident individuals, responsible citizens and effective contributors. Based on this common philosophy, primary and secondary schools develop their own curriculum to help students develop the knowledge, skills and attitudes necessary to thrive in the 21st century.

Systems worldwide are coming together with help from international organisations such as the OECD, to design and implement future-oriented curricula that aspire to the highest international standards of quality in education, while also responding to national and local challenges. Students, educators and policy makers internationally face the challenge of determining both what one needs to learn today in order to thrive into tomorrow, and how to organise and operate school systems to enable this learning. As a pioneer, Scotland has been tackling these issues, testing solutions and exchanging with peers for over a decade. The current report provides one more opportunity for countries to learn from Scotland's inspiring experience.

In 2020, Scotland invited the OECD to assess the implementation of CfE in primary and secondary schools to understand how school curricula have been designed and implemented in recent years. This was undertaken by the OECD Implementing Education Policies team, which conducts comparative analysis of education policy implementation and offers tailored support to help countries in the design and effective implementation of their education policies. This report builds on the analysis of documentation, academic literature and experiences from other OECD countries; and on group interviews, school visits and events conducted online with stakeholders from across Scotland.

The report assesses the progress made with CfE since 2015, and proposes recommendations aimed to support Scotland as it further enhances CfE to achieve its potential for learners. The OECD team finds that CfE continues to offer a vision and a philosophy of education widely supported and worth pursuing. Its design offers the flexibility needed for a few adjustments to further improve the learners' journey, if schools and teachers receive adequate support from the system. Engagement lies at the heart of CfE and offers the possibility, with better structure, for stakeholders to take shared responsibility for the policy while guaranteeing its effective leadership. The report also acknowledges the efforts made to enhance the coherence of the policy environment with CfE, and proposes ways to strengthen this coherence. Overall, this report suggests CfE still offers great potential for learners, which Scotland can fulfil by adopting a more structured and strategic approach to curriculum review and implementation. Just as Scotland's Curriculum

for Excellence was among the pioneers of 21st century learning, its most recent developments hold valuable lessons for other education systems and their own curriculum policies.



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Acknowledgements

This assessment was commissioned jointly by the Scottish Government and Parliament. The OECD team is indebted to John Swinney, Deputy First Minister and Cabinet Secretary for Education and Skills in the Scottish Government, for his support throughout the assessment process, and to Clare Adamson, Member of the Scottish Parliament (MSP) and Convener of the Education and Skills Committee of the Scottish Parliament, for the Committee's availability to engage as part of the assessment. We are grateful for the invaluable support, contributions and guidance from the Scottish Government Learning Directorate officials and staff. In particular, the team would like to thank Julie Anderson, Maggie Young, and Anna Stansfield of the Learning Directorate for co-ordinating the process.

The assessment benefitted from the contributions of the officials and education experts from across Scotland's education system, who shared their knowledge with the OECD team during the assessment and provided feedback on this report. We would like to particularly acknowledge the valuable contributions and feedback provided by the members of the Scottish Practitioner Forum. We are also grateful for the contributions of officials from governance committees and advisory boards, public agencies, and local authorities and Regional Improvement Collaboratives.

The OECD team thanks all the participants in the assessment visits (see Annex B), starting with the headteachers, teachers, students and parents of the schools who made time to meet with us during a challenging school year. We thank the scholars, researchers, non-governmental organisations, unions and professional associations, and all the bodies and individuals who kindly shared their views, experience and knowledge with us. The courtesy extended to us throughout our virtual visits to Scotland (United Kingdom) always made these challenging visits the more instructive and enjoyable.

The OECD team who conducted the assessment and co-authored this report was composed of Beatriz Pont, Senior Policy Analyst at the OECD, Romane Viennet, Policy Analyst at the OECD, Professor Anne Looney, Executive Dean of Dublin City University's Institute of Education, and Professor Jan van den Akker, University of Twente (Annex A). The OECD team acknowledges the support from the OECD Secretariat, and particularly from Andreas Schleicher, Director for Education and Skills; Paulo Santiago, Head of the Policy Advice and Implementation Division; and Miho Taguma, Ester Carvalhaes, José-Luis Alvarez-Galván, Pierre Gouëdard and Rebecca Santos of the Directorate for Education and Skills, who provided in-depth feedback, advice and support at critical stages of the development of the report. Precious support was provided by Jacqueline Frazer, who prepared the report for publication and provided administrative support; by Rachel Linden, who organised the publication process; and by Catherine Bremer, Cassandra Davis, Claire Marguerettaz, Lawrence Pacewicz, and Mia Tuzovic, who provided additional counsel.

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Acronyms and abbreviations

ADES	Association of Directors of Education in Scotland
AHDS	Association of Headteachers and Deputes in Scotland
BGE	Broad General Education
CAB	Curriculum and Assessment Board
CfE	Curriculum for Excellence
CLD	Community learning and development
COSLA	Convention of Scottish Local Authorities
COVID-19	Coronavirus disease (2019)
CPD	Continuous professional development
DYW	Developing the Young Workforce: Scotland's Youth Employment Strategy
ECEC	Early childhood education and care
EIS	Education Institute of Scotland
EME	English Medium Education
ESCS	Index of economic, social and cultural status
Es and Os	Experiences and Outcomes
GDP	Gross domestic product
GIRFEC	Getting it right for every child
GME	Gaelic Medium Education
GTCS	General Teaching Council for Scotland
HE	Higher education
HMIE	Her Majesty's Inspectorate of Education
ICEA	International Council of Education Advisers
ISCED	International Standard Classification of Education
IT	Information technology
ITE	Initial teacher education
LAs	Local authorities
MSPs	Members of Scottish Parliament

NASUWT	National Association of Schoolmasters Union of Women Teachers
NIF	National Improvement Framework
NPA	National Progression Award
NPFS	National Parent Forum of Scotland
NQ	National Qualification
OECD	Organisation for Economic Co-operation and Development
PGDE	Professional Graduate Diploma in Education
PISA	Programme for International Student Assessment
PSE	Personal and Social Education
RICs	Regional Improvement Collaboratives
RMPS	Religious, Moral and Philosophical Studies
SCQF	Scottish Credit and Qualifications Framework
SEC	Scottish Education Council
SDS	Skills Development Scotland
SFC	Scottish Funding Council
SFR	Standard for Full Registration
SIMD	Scottish Index of Multiple Deprivation
SLS	School Leaders Scotland
SNP	Scottish National Party
SNSA	Scottish National Standardised Assessments
SPR	Standard for Provisional Registration
SSOT	Single source of truth
SSTA	Scottish Secondary Teachers' Association
SQA	Scottish Qualifications Authority
STEM	Science, technology, engineering and mathematics
UCAS	Universities and Colleges Admissions Service

Executive summary

Curriculum for Excellence in context

Scotland's Curriculum for Excellence (CfE) offers an inspiring and widely supported philosophy of education. Its framework allows for effective curricular practices and for the possibility of a truly fulfilling education for learners. Building upon its commitment to education quality, Scotland can make adjustments within CfE's flexible framework to achieve its potential for learners present and future.

Students in Scotland engage in learning through CfE, which aims to provide a holistic, coherent, and future-oriented approach to learning between 3 and 18 years and lets schools design their curriculum based on a common framework. CfE's approach was designed in 2004 and started rolling out in schools in 2010.

The Scottish Government invited the OECD to assess the implementation of CfE, to understand how curricula are designed and implemented in schools, and to identify what can be improved for CfE to continue delivering quality learning for all students.

The OECD assessment looks at the Broad General Education (BGE) and the Senior Phase from an implementation perspective. The analysis was undertaken following standard OECD methodology, including desk-based policy analysis, interviews with stakeholders, school visits, exchanges with a practitioner's forum, and comparative analysis based on research and international practices. All visits and meetings occurred online due to the coronavirus (COVID-19) travel restrictions.

Key findings

Scotland's Curriculum for Excellence continues to be a bold and widely supported initiative, and its design offers the flexibility needed to improve student learning further

CfE's vision to achieve excellence for all students is widely shared by stakeholders and continues to be an inspiring example equated with good curriculum practice internationally. The two decades since the formulation of CfE's vision have been marked by accelerated changes, including in educational research, giving rise to new insights into student learning, pedagogy, and the kind of knowledge, skills and attitudes students need to progress as learners. CfE has stood the test of time, but it will only remain relevant if Scotland uses these insights to continue its development.

CfE's complex framework works well in BGE and for learners taking Advanced Highers, where the concepts, pedagogical and learning approaches are coherent, and the implemented school curricula seem consistent with policy intentions. However, there is some ambiguity about the role of knowledge and ways of knowing in a 21st century curriculum framework. Adjustments might therefore be needed in the concepts of CfE and the tools to put them in practice in both BGE and the Senior Phase. The structure, learning practices and assessment approaches in the Senior Phase also need adapting to be consistent with CfE's vision, and to allow for the smooth curriculum experience promised from 3 to 18.

Teachers are well-trained and respected professionals in Scotland, and school leaders have developed strong pedagogical leadership capacities. Both are committed to varied teaching approaches for student learning and have proven their ability to develop schools' own curricula. Curriculum design and continuous improvement require time and professional investment, which schools can only achieve with ongoing support from the system.

Stakeholder engagement is at the heart of Curriculum for Excellence and offers the possibility, with better structure, for shared ownership and effective leadership of CfE

Significant efforts were made to engage stakeholders throughout CfE's lifecycle, which contributed to wide support for CfE as a direction of travel for Scottish education. However, there is a gap between stakeholders' involvement and their impact on effective enhancements to CfE implementation.

Stakeholders agree that schools and the profession should hold responsibility for the conception, implementation and outcomes of their own curricula, provided the rest of the system fulfil their own responsibilities to support schools and the profession within a clear policy framework. At the same time, CfE ownership was most often described as fragmented, with many lacking clarity on their responsibilities.

Scotland successfully developed an education language to support the philosophy of CfE that made its way into daily discussions of education policy makers, teachers and learners alike, thanks to communication efforts by system leaders. But the constant production and recycling of documentation was often described as "overwhelming", and the terminology used too technical and open to interpretation.

Continued efforts are needed to enhance the coherence of the policy environment with Curriculum for Excellence

CfE's originality continues to influence international curriculum policy. Scotland made great progress in developing and supporting teachers' capacity to be curriculum makers, and the capacity of school leaders to lead the curriculum process in their schools. This work has become challenging for schools considering the multiple new policy initiatives; and Scotland's comparatively high rate of teachers' class contact time and its expectations for teachers to lead and plan curriculum locally.

Other education policies were developed to build a coherent system around CfE's innovative philosophy. However, work remains on striking a balance between autonomy with CfE and equity for students and aligning and simplifying the many initiatives. Early policy developments showed promise to align student assessment, qualification practices and system evaluation to CfE's philosophy. The 2010 Framework for Assessment was hailed internationally as an exemplar. Despite attempts to reform qualifications, misalignment between CfE's aspirations and the qualification system became a barrier to CfE's implementation in secondary education. Additionally, the data generated by current system monitoring seem limited to fully support CfE's ambitions.

Education is a source of pride in Scotland, which shows in the broad commitment to CfE and educational excellence for all. It has been granted great importance in the political debate to a degree that would be the envy of many a system. This importance has sometimes translated into a busy system at risk of policy and institutional overload. The centrality of education in the political debate, allied with the absence of an identified cycle of policy review, has resulted in a reactive and oftentimes political approach, which is not the most efficient way to address issues with CfE.

The approach to the ongoing implementation of Curriculum for Excellence has lacked structure and long-term perspective

The Curriculum and Assessment Board and predecessors provided the opportunity to engage stakeholders, get feedback and develop agreements on CfE's developments. Schools and local authorities

were afforded significant autonomy to shape CfE, possibly building capacity on the ground. Yet, CfE has lacked a structured approach to plan its developments with a longer-term perspective.

Recommendations for next steps: Focus on student learning progress

Balance Curriculum for Excellence so students can fully benefit from a coherent learning experience from 3 to 18 years

- **Re-assess CfE's aspirational vision against emerging trends in education** to take account of evolutions in education and society: Scotland should consider updates to some of its vision's core elements and their implications for practice, in particular, the role of knowledge in CfE; and define indicators aligned to the vision to help understand students' progress across all four capacities set out in CfE.
- **Find a better balance between breadth and depth of learning throughout CfE** to deliver Scotland's commitment to providing all learners with a rich learning experience throughout school education: Scotland could consider how the design of CfE can better help learners consolidate a common base of knowledge, skills and attitudes by the end of BGE, and nurture and hone this base for them to progress seamlessly through Senior Phase and the choices its offers.
- **Adapt the Senior Phase to match the vision of CfE**: Scotland could consider adapting the pedagogical and assessment practices and the structure of learning pathways in the Senior Phase to enhance learners' experience of upper-secondary education and help them develop CfE's four capacities continuously.
- **Continue building curricular capacity at various levels of the system using research** by developing the environment of curriculum design support around schools, including in supporting exchange and collaboration between practitioners for curriculum design and experimentation within and across schools; and collaboration between schools and universities.

Combine effective collaboration with clear roles and responsibilities

- **Ensure stable, purposeful and impactful stakeholder involvement with CfE**: System leaders at national and local levels could continue encouraging the involvement of stakeholders (and in particular, students) with CfE by better structuring each engagement initiative they offer, clarifying its purpose, designing it accordingly, and letting stakeholder input inform decision making.
- **Revise the division of responsibilities for CfE**: System leaders and stakeholders could revise the current allocation of responsibility for CfE, including responsibilities for its strategic direction, its reviews and updates, and the response to schools' needs of support with curriculum issues. The revised allocation should be stable over time to fulfil Scotland's commitment to shared ownership of CfE.
- **Structure a coherent communication strategy to support developments of CfE**: System leaders, with the Learning Directorate and Education Scotland at the forefront, could develop a communication strategy in support of CfE's next developments and collaborate with practitioners, scholars and other CfE stakeholders as they do so.

Consolidate institutional policy processes for effective change

- **Provide dedicated time to lead, plan and support CfE at the school level**: In support of the next phase of development of CfE, Scotland could consider the provision of additional dedicated and ring-fenced time for all teachers, for curriculum planning, for monitoring of student achievement and in support of moderation of assessment outcomes.

- **Simplify policies and institutions for clarity and coherence**: To align the institutional structures with clear ownership of CfE, Scotland could explore assigning leadership and development responsibilities for curriculum (and perhaps assessment) to a specialist stand-alone agency; and consider refreshing the remit of an inspectorate of education regarding CfE.
- **Align curriculum, qualifications and system evaluation to deliver on the commitment of *Building the Curriculum 5***: Scotland could first identify modes of student assessment that could be used in school and external settings at Senior Phase levels, in alignment with the four capacities and CfE philosophy; and second, re-develop a sample-based evaluation system to collect robust and reliable data necessary to support curriculum reviews and decision making.
- **Develop a systematic approach to curriculum review**: Scotland could consider establishing a systematic curriculum review cycle with a planned timeframe and specific review agenda, led by the specialist stand-alone agency.

Lead the next steps for Curriculum for Excellence with a long-term view

- **Adopt a structured and long-term approach to implementation**: Building on the system's existing strengths, Scotland should consider how to take on board the recommendations in this report as a coherent package rather than individual policy actions for the next steps.

1 The Scottish education system in context

This chapter presents an overview of the education system in Scotland (United Kingdom) and introduces the background to the implementation of Curriculum for Excellence (CfE). It describes the framework and methodology used by the OECD team to assess the processes and progress made with the implementation of CfE in Broad General Education and the Senior Phase and to propose possible developments in the future. Finally, it takes stock of transversal tensions around CfE that inform the analysis in the following chapters.

Introduction and methodology

In 2019, the Scottish Government invited the OECD to conduct an assessment to take stock of the implementation of its *Curriculum for Excellence* policy (CfE) and identify areas for potential development in the future to ensure that it contributes as effectively as possible to the education of young people in Scotland. This report presents the results of the assessment. It was developed as part of the OECD Implementing Education Policies programme (Box 1.1).

Box 1.1. Implementing Education Policies: Supporting change in education

OECD's Implementing Education Policies programme offers peer learning and tailored support for countries and jurisdictions to help them achieve success in the implementation of their education policies and reforms. Tailored support is provided on topics on which the OECD Directorate for Education and Skills has comparative expertise, including (but not limited to): introducing new curricula, developing schools as learning organisations, teacher policy, evaluation, assessment and accountability arrangements/education monitoring systems and building educational leadership capacity. The tailored support consists of three complementary strands of work that aim to target countries' and jurisdictions' needs to introduce policy reforms and impactful changes:

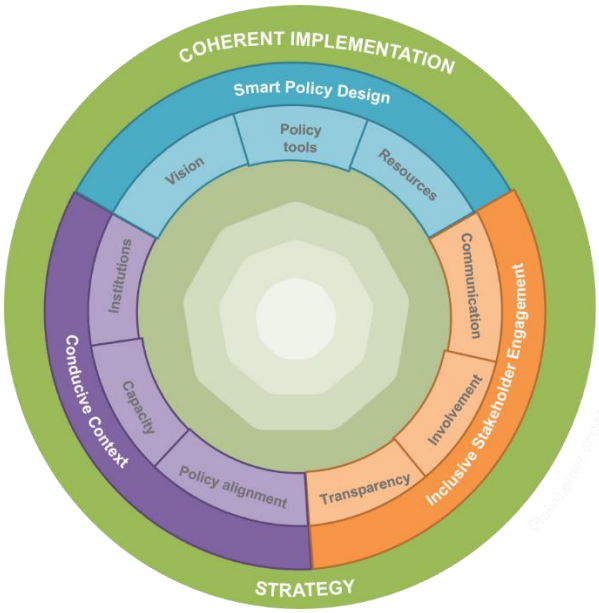
- Policy assessments take stock of the selected policy and change strategy, analyse strengths and challenges and provide concrete recommendations for enhancing and ensuring effective implementation. They follow a concrete methodology: a desk study of policy documents, a three to five-day assessment visit, in which an OECD team of experts interviews a range of key stakeholders from various levels of the education system, and additional exchanges with a project steering or reference group.
- Strategic advice is provided to education stakeholders and tailored to the needs of countries and jurisdictions. It can consist of reviewing policy documents (e.g. white papers or action plans), contributing to policy meetings or facilitating the development of tools that support the implementation of specific policies.
- Implementation seminars can be organised to bring together education stakeholders involved in the reform or change process for them to discuss, engage and shape the development of policies and implementation strategies.

Website: http://www.oecd.org/education/implementing-policies/
Brochure: http://www.oecd.org/education/implementing-education-policies-flyer.pdf

CfE is Scotland's comprehensive curriculum policy, developed between 2004 and 2010 and first implemented in 2011. With more than 16 years since its inception, it is an opportunity to review its implementation with a focus on its future.

The OECD assessment focuses on CfE in the Broad General Education (BGE) and Senior Phase (upper-secondary education). It uses the OECD Framework on Education Policy Implementation (Figure 1.1) to review how CfE has been implemented until 2020 and provides options to consider for next steps. The framework highlights that analysing the implementation of an education policy requires looking at the dimensions of policy design, stakeholder engagement, and policy context, and how they weave together to turn policy into reality (Viennet and Pont, 2017[1]; Gouëdard et al., 2020[2]).

Figure 1.1. The OECD Framework on Education Policy Implementation



Source: OECD, (2020[3]), *An implementation framework for effective change in schools*, https://doi.org/10.1787/4fd4113f-en.

To undertake this analysis, the OECD formed a team of OECD analysts and external experts of curriculum and assessment implementation (see Annex A), who are the authors of this report. The OECD team carried out a desk-based analysis of policy documents, evidence and research on CfE implementation. The sheer number of existing publications about CfE is a testament to the system's commitment to continuous educational improvement. Key documents in the corpus included, but were not limited to:

- A *Building the Curriculum* series and complementary policy documents developed at central and local levels.
- A previous OECD review of the Scottish education system (OECD, 2015[4]).
- Reports and evidence submitted to Scottish Parliament commissions.
- Reports commissioned by the Scottish Government and CfE governance committees.
- The initial evidence pack compiling information and case studies on key issues of CfE and its implementation. The Scottish Government produced the document with help from key stakeholders for the OECD assessment (Scottish Government, 2021[5]).
- Published academic articles and ongoing research reports.
- Position papers and studies carried out about CfE by major stakeholders in the system.

Against the rich backdrop of existing documentation of CfE and its implementation, the OECD team conducted a series of online group interviews and virtual school visits to gather primary data. The team undertook virtual policy and school visits, including interviews with key stakeholders from across the Scottish education system and with practitioners, learners and their parents to complement the evidence base.

The team met virtually with representatives of over 40 organisations, education researchers and stakeholder committees during the first week. Additional interviews with scholars were also conducted between October and November 2020. The second week of online visits was dedicated to visiting schools and meeting with additional practitioners, learners and their parents from across Scotland, resulting in discussions with stakeholders from 14 schools in total. School visits started with a review of their curriculum model before holding meetings with school leadership, teachers, parents and learners. The group

interviews consisted of 75 minute long meetings with groups of four to eight practitioners, learners, and parents. A final stakeholder consultation event was held on line to discuss OECD preliminary findings on 16 March 2021. The detailed agenda for each mission week, additional scholar interviews and the final event can be found in Annex B.

All school visits and stakeholder interviews were conducted online due to the coronavirus (COVID-19) crisis and travel restrictions, using secure online video-conferencing platforms and following the OECD's policy on personal data protection. Although this setting prevented the collection of observational data in school classrooms, it allowed for qualitative group interviews with learners at various stages of education and with teachers and school leaders from schools located in ten different local authorities. The OECD team checked the evidence gathered from these interviews and virtual school visits for consistency against relevant research and findings from trusted sources when they already existed, which brought additional confirmation to this report's findings.

Finally, the authors purposefully chose to analyse statistics and other quantitative data from years prior to 2020, to control for the effect of the COVID-19 crisis on Scotland's education system since the focus of this report is on trends and processes that predate the pandemic. Unless the phenomenon analysed is directly linked to the crisis, the latest school year of reference used for data is 2018-19.

This report presents the analysis and results of the OECD team analysis. It is structured as follows:

- This chapter introduces the context of the assessment, provides an overview of the Scottish education system, its performance, policies and tensions, and provides a conclusion on issues to consider for CfE policy to adjust in the future. The following chapters then analyse the dimensions central to the implementation of CfE.
- Chapter 2 analyses the design of CfE, current practices and considerations for CfE to be most effective for Scottish young people.
- Chapter 3 analyses stakeholders' engagement with CfE, how they have engaged as part of the implementation process, and how engagement could improve in the future.
- Chapter 4 analyses the policy environment of CfE and how its contextual dimensions can contribute to, or hinder, progress with CfE.
- Chapter 5 brings together the different dimensions to provide a coherent and actionable implementation perspective for the future of CfE.

The Scottish economic and social context

Scotland is a country of the United Kingdom, bordered to the south by England, to the east by the North Sea, and by the Atlantic Ocean to the west and north. Scotland has around 5.46 million people, including 1.03 million (19%) aged under 18. The Highlands, in the north and northwest of mainland Scotland, and the Borders, to the south, are sparsely populated, while the central belt accounts for the bulk of the population. Scotland also has a large number of islands, many off the west coast and with Orkney and Shetland to the north (OECD, 2015[4]). Scotland's population is at a record high and has been growing steadily since the turn of the century. This has been driven mainly by net inward migration as opposed to births, and the population of children has declined slightly over this period (Scottish Government, 2021[5]). The ethnic minority population of Scotland has grown rapidly over the last decade, and diversity in Scottish schools is increasing as a result. Many languages such as Polish, Urdu and Punjabi are spoken in communities and schools alongside English, as well as the heritage languages of Gaelic and Scots.

The Scottish economy is structured as most advanced economies, with services accounting for most of its economic output (about 75% in 2016) and employment. Key sectors in Scotland include oil and gas; the food industry; energy, including a growing renewable energy sector; financial services; tourism; creative

industries; and education. The Scottish economy was performing well before the COVID-19 crisis. Annual gross domestic product (GDP) growth rates remained positive, between 0.7% and 1.5% in 2016-19, and unemployment was at historically low levels, at 3.5% in 2019 (Scottish Government, 2019[6]). By comparison, annual growth rates for the United Kingdom as a whole were slightly higher (between 1.2% and 2.2% in 2016-19), while the overall unemployment rate remained slightly higher (3.8% in 2019), the country being affected by the uncertainty around Brexit negotiations.

The COVID-19 crisis provoked serious contractions to the Scottish economy, as in other economies, amounting to a 21.4% fall in GDP over the first half of 2020 (latest available data), in line with the 22.1% contraction in the United Kingdom's economy overall. The impact on different economic sectors varied according to the extent of corresponding restrictions, but the fall in output was spread relatively evenly across sectors. By way of comparison, Scotland's GDP fell around 4% over six quarters during the global financial crisis. The quarterly unemployment rate for May-July 2020 increased by 0.7% compared to the similar point the previous year (Scottish Government, 2020[7]). Around 19% (1 020 000 individuals) of the population of Scotland were in relative poverty in 2016-19 (after housing costs). Over half of those in relative poverty were in poverty despite having at least one working adult in the household. This proportion increases for children, with almost a quarter (24%, around 230 000 children) (Scottish Government, 2021[5]).

At the time of writing this report, two factors influenced the political context around Scotland's education. First, parliamentary elections are planned for May 2021. As part of the United Kingdom, Scotland's politics operate under the United Kingdom's constitutional monarchy, through Scottish representation at the Parliament of the United Kingdom and within Scotland's own legislative and executive institutions. Since the Scotland Act of 1998, the Scottish Parliament took full legislative responsibility for a range of devolved competencies, including education. The Members of the Scottish Parliament (MSPs) are elected every five years, following which the leader of the party with majority support in Parliament is usually nominated candidate for First Minister and appointed by the Queen. The First Minister heads the Scottish Government, determines portfolios and appoints other ministers and cabinet secretaries with the approval of Parliament and the Queen. At the time of writing this report and before the Scottish elections planned for May 2021, the Scottish National Party (SNP) had been in power in Scotland since 2007 (including as a minority government since the 2016 Scottish elections) and had kept education as one of their top policy priorities during that time.

Second, the COVID-19 crisis. Like many countries, Scotland was hit by the COVID-19 crisis, which resulted in school closures, adaptations to the national qualification examination diets and other changes that could mark the education system for the long term. The COVID-19 pandemic was first declared to have spread in Scotland on 1 March 2020, after which schools closed on 20 March, along with several other sectors, and the 2020 national exam diet was cancelled. Scotland followed the rest of the United Kingdom into lockdown from 23 March until the end of May, when restrictions started easing. Education continued following a remote learning model until the summer, with a number of government initiatives aiming to guarantee that all students could have access to a computer and a reliable Internet connection. Schools opened again in August, with students allowed back into classrooms following safety protocols until the end of 2020. The analysis in this report focuses on CfE implementation before the COVID-19 crisis of 2020 but considers the opportunities created by key events of that year for future developments of CfE.

An overview of the Scottish education system

School education structure

The Scottish education system counts around 2 500 schools serving learners from four years old, with 96% in publicly funded local authority-managed schools. Not all schools in Scotland offer early childhood

education and care (ECEC, referred to as "early learning and childcare" in Scotland). As of May 2020, the publicly funded school system caters to 96 375 students in publicly funded ECEC; to 398 794 students in primary education; to 164 397 students in lower-secondary education; and 127 666 students in upper-secondary education. The school system employs more than 49 000 teachers (Table 1.1). Operated by non-public entities, independent schools (about 100 in 2020) provide education for over 30 000 students. In 2019, 114 publicly funded schools for special education needs were also operating, serving 7 132 students, although the majority of the students with an additional support need recorded (more than 30% of all students) attend mainstream schools. The Scottish school system also includes Gaelic Medium Education (GME), which aims for young students to learn fluently in both Gaelic and English through primary and secondary education. There are 8 stand-alone GME primary schools (out of the 2 004 total primary schools), 52 primary schools with a GME and EME (English Medium Education) stream in the same school, and 32 secondary schools that offer GME subjects (out of 358 secondary schools in total).

Table 1.1. Number of students, schools and teachers by level of education in Scotland (United Kingdom), 2020

	ECEC (Early learning and childcare), publicly funded	Primary education	Secondary education		Independent schools	Special schools
			BGE[1]	Senior Phase		
Number of students	96 375 (September 2019)	398 794	164 397	127 666	30 000	7 132
Number of schools (or ECEC centres)	2 576	2 004	358		100	114
Number of teachers or qualified staff	798 (September 2019)	25 027	23 522		..	1 927
Student-teacher ratio	..	15.9	12.4		..	3.7
Enrolment rates	98% of eligible 3-4 year-olds	..	..	..	..	x
Number of schools offering GME (either stand-alone or with EME)	..	60	32		..	x

Notes: 1: BGE stands for Broad General Education, which encompasses early learning, primary and lower-secondary education levels.
.. = missing data; x = not applicable. All data are based on the latest published data as of May 2020.
Source: Scottish Government (2021[5]), *Curriculum for Excellence 2020-2021 - OECD review: initial evidence pack*, https://www.gov.scot/publications/oecd-independent-review-curriculum-excellence-2020-2021-initial-evidence-pack/ [accessed on 24 March 2021].

According to the Scottish Government's classification of school locations, 31% of the students attending publicly funded schools went to a school in a large urban area, and 42% attend schools in smaller urban areas. The remaining 27% attend schools in accessible small towns (9%), remote small towns (5%), accessible rural areas (8%) and remote rural areas (4%) (Scottish Government, 2021[5]).

The school system is organised in sequential levels summarised in Table 1.2. Curriculum for Excellence (CfE) caters for children aged 3 to 18 years, beyond the boundaries of compulsory education (ages 5-16 in Scotland). ECEC is provided for those up to five years of age (International Standard Classification of Education [ISCED] 0), and while it is not compulsory, 98% of eligible children aged three and four are registered in 2020. Children aged three to four are entitled to 20 hours per week of unconditional free access to ECEC, which is fewer than most OECD countries (OECD, 2020[8]). At the time of drafting this report, the Scottish Government was phasing in an expansion that will almost double this hourly entitlement for early years, from 600 hours to 1 140 hours per year (Scottish Government, 2021[5]).

Primary education provides for children aged 5-12 (ISCED 1) as the first part of what is commonly known as BGE (Broad General Education) under CfE. Starting at age five in Scotland, compulsory education

starts earlier than in most OECD countries, where students are required to start primary education at the age of six or seven. The seven years of primary education place Scotland's duration above OECD average, at the same length as in Australia, Denmark, Iceland and Norway (OECD, 2019[9]). Students usually complete primary education by age 11 or 12 (Table 1.2).

Secondary schools offer up to six years of education, similarly to the OECD average (OECD, 2019[9]). Lower-secondary education (ISCED 2) formally continues the BGE cycle with three years (S1 to S3). The following three years (S4 to S6) form the upper-secondary education cycle, known as the "Senior Phase" under CfE. Students typically prepare most of their qualifications during the Senior Phase, with S4 being the last year of compulsory education. Most learners continue studying beyond the compulsory age of 16 in upper-secondary education. In 2018/19, 11.9% of school leavers were in S4, 26.8% in S5, and 61.2% in S6 (Scottish Government, 2021[5]). Under Curriculum for Excellence, upper-secondary levels aim to offer a variety of educational pathways and lead to a broad range of qualifications to diversify students' experience:

- General upper-secondary education covers three years at ISCED 3 for ages 15 to 18. It is offered in secondary schools and is the stage aimed at preparing young people for moving to further education, higher education (ISCED 6-8), training or into the workforce. Under CfE, schools can offer a wide variety of pathways to cater for learners' career aspirations through the Senior Phase, which include an increasing number of vocational opportunities within general education, including modern apprenticeships, for instance, or additional courses taken in colleges.
- Vocational educational pathways are also offered in colleges of further education (ISCED 3) with opportunities to continue on to professional studies and higher education (ISCED 5-8).

Table 1.2. Structure of education provision in Scotland (United Kingdom)

Age (years)	ISCED	Education level	Institutions
2/3-5	0	Early learning and childcare	
5-12	1	Primary: Seven years, P1 to P7 (compulsory)	Primary schools
12-15	2	Secondary: Three years, S1 to S3 (compulsory)	Secondary schools: comprehensive and mostly co-educational
15-18	3	Upper-secondary: Three years, S4 (compulsory) and S5-S6 (optional). Subjects studied at different levels for various qualifications including general and vocational	Secondary schools, colleges of further education or independent training providers
	4	Further education (non-advanced courses: vocational and general studies, etc.) Higher education (advanced courses: Higher National Certificate, Higher National Diploma, etc.)	Colleges
17+	5	Higher education: Higher National Certificate, Higher National Diploma, professional training courses and postgraduate	Higher education institutions (universities and colleges)

Sources: OECD (2020[10]), "Diagram of the education system – United Kingdom", https://gpseducation.oecd.org/Content/MapOfEducationSystem/GBR/GBR_2011_EN.pdf; European Commission (2020[11]), "United Kingdom – Scotland Overview", https://eacea.ec.europa.eu/national-policies/eurydice/content/united-kingdom-scotland_en [accessed on 22 March 2021].

There is no school-leaving certificate in Scotland. Students in upper-secondary education may take a number of qualifications and courses, including Scottish National Qualifications or Awards certificated by the Scottish Qualifications Authority (SQA), Scotland's awarding body. Learners can enrol and pass a range of qualification subjects from National 1 to National 5, Higher, Advanced Higher courses, Skills for Work and Baccalaureate qualifications, and more (Scottish Credit and Qualifications Framework, 2021[12]). These can be in areas such as English, Physics, Maths, Politics as well as in Technology, Creative Arts,

Drama, Environmental Sciences or Food and Health, for example. Scottish National Qualifications – including National 2-5, Higher and Advanced Higher – are single-subject qualifications that certify the achievement of a level of knowledge and skills in a range of subjects. They are referenced against the Scottish Credit and Qualifications Framework (SCQF), which unifies all qualifications in Scotland and classifies them between its 12 levels (Scottish Government, 2021[5]).

Scotland has worked to promote and develop its vocational education since 2014, including strengthening partnerships between schools, colleges and employers to cater more efficiently to learners' needs, linking with the economy's needs. Colleges offer vocationally oriented courses, with studies predominantly leading straight to employment within a specific industry. Regular qualification course levels include the Higher National Certificate (one year to complete) and Higher National Diploma (two years). Like the other qualifications, there is no specific age at which learners are supposed to take them. For students in the Senior Phase, schools work closely with colleges and often employers to increase the number of vocational opportunities available to learners and help them complete vocational courses alongside National Qualifications courses. Colleges also collaborate with local authorities and employers to deliver Modern Apprenticeships programmes for young people aged 16 or above who have left school and Foundation Apprenticeships for students still in full-time education. They also work in partnership with employers to prepare students for work and with universities to allow fast-track degree entry on some courses.

Scottish universities and colleges set their own entry requirements, often combining specific qualifications, subject, or grade, or a specific grade required in a subject relevant to the programmes applied for. Starting in 2020, courses at Scottish universities and colleges have two sets of requirements: standard and minimum. Minimum entry requirements apply for applicants who are considered to be "widening access" students, based on their merit, socio-economic background, school's category as measured by the Scottish Index of Multiple Deprivation (SIMD) and other criteria (UCAS, 2020[13]). Standard requirements can be stricter for competitive degrees, including requirements in terms of number of passes and minimum grades to obtain an SQA Highers and equivalent international qualifications.

Teachers and school leaders

In Scotland, all teachers need a graduate degree or equivalent, plus a teaching qualification to gain Qualified Teacher Status. Teaching qualifications include undergraduate degrees (Bachelor of Education, Bachelor of Arts, Bachelor of Science; ISCED 6) and postgraduate qualifications (Professional Graduate Diploma in Education [PGDE]; ISCED 7). For all levels of education (pre-primary to upper-secondary), the minimum qualifications required for the Standard for Full Registration are a bachelor's degree (ISCED 6) and a postgraduate teaching qualification (ISCED 7) or a bachelor's degree in education (ISCED 6) (OECD, 2019[14]). The Standard for Provisional Registration (SPR) specifies what is expected of a student teacher at the end of initial teacher education seeking provisional registration with the General Teaching Council for Scotland (GTCS). Having gained the SPR, all provisionally registered teachers continue their professional learning journey by moving towards attaining the Standard for Full Registration (SFR). The SFR is the gateway to the profession and is the benchmark of teacher competence for all teachers (OECD, 2019[14]).

At lower-secondary level, teachers in Scotland spend 63% of their working time teaching, which is higher than the OECD average (43%). Scotland is among the only OECD education systems, along with countries such as Chile, Latvia and Spain, in which teachers spend at least 50% of their statutory working time teaching (OECD, 2019[9]). Regulations state that teachers at all levels of education have a working week of 35 hours, and they are expected to be in school 1 045 hours per year (OECD, 2019[14]). Five additional in-service days per year are reserved without class teaching. During their working time, teachers in most countries are required to perform various non-teaching tasks such as lesson planning/preparation, marking students' work and communicating or co-operating with parents or guardians.

Scotland is one of few OECD education systems in which teachers are required to teach the same number of hours across levels of education. It is more common in OECD countries and economies to see teaching time decrease as the level of education increases. Teaching time has evolved in Scotland between 2000 and 2019: it dropped by 95 hours at pre-primary and primary levels, as part of a teachers' agreement that introduced the 35-hour working week (*A Teaching Profession for the 21st Century*, 2001), resulting in a maximum of 22.5 hours of teaching per week for primary, secondary and special education teachers. Even with this decrease in net contact time, the maximum time that teachers at these levels can be required to teach is still longer than the OECD average (OECD, 2019[9]). Teachers are also expected to complete 35 hours of professional development per annum in Scotland. Professional development is excluded from statutory teaching time (OECD, 2019[14]).

In Scotland, guidelines on school leaders' (known in Scotland as headteachers) working conditions do not detail their responsibilities and tasks. This is the case for about one-quarter of OECD countries with available information, including Denmark, Estonia, Finland, Italy, Mexico, the Netherlands, New Zealand, Norway and Sweden. By comparison, regulations explicitly outline expectations for school leaders' managerial and leadership roles in more than half of the OECD and partner countries with available data (OECD, 2020[8]). In 2018, the Scottish Government and local authorities agreed on a Headteachers' Charter, committing local authorities to support school leaders as the drivers of school improvement and devolving greater responsibility to them in decision making and resource use.

Attainment

Among students leaving school education in Scotland in 2018/19, 95% entered a positive destination, according to the Government's measures, the highest since 2009/10. Positive destinations include higher education, further education, employment, training, voluntary work and personal skills development, while other destinations include unemployed and seeking work, unemployed and not seeking work, and unknown. In general, after secondary education, learners mostly go on to higher education (40.3% in 2018/19), further education (27.3%) and into employment (22.9%). Out of the remaining 9.5%, half go to "other positive destinations" (4.5%) (Scottish Government, 2020[15]).

In addition, in 2019, Scotland's Annual Participation Measure showed that 91.6% of 16-19 year-olds were participating, meaning they were in some form of education, employment or training and other personal development for most of the year. This ranged from 85.8% of young people in the most deprived areas to 96.3% in the least deprived areas. The gap (10.5 percentage points) has been narrowing over time as the proportion of young people from the most deprived areas who are participating has increased faster than has the proportion of young people from the least deprived areas (Scottish Government, 2021[5]).[1]

School leaver attainment statistics in Scotland are based on the range and level of National Qualifications a student has accumulated by the time he or she leaves school. Reporting is based on Scotland's common qualifications framework, the Scottish Credit and Qualifications Framework (SCQF). More than 60% of 2018/19 school leavers achieved one or more qualification passes at SCQF Level 6 or better (e.g. Higher); 85% had one or more passes at SCQF Level 5 or better (e.g. National 5); and 95.9% attained one or more passes at SCQF Level 4 or better (e.g. National 4).

These attainment statistics remained stable since 2014/15 and progressed since 2009/10 when 50.4% of school leavers achieved one or more passes at SCQF Level 6 or better; 77.1% had one or more passes at SCQF Level 5 or better; and 94.4% attained one or more passes at SCQF Level 4 or better. Attainment in terms of four and five passes at SCQF Level 6 also remained stable since 2014/15 and progressed since 2009/10.

The Scottish Government highlighted that recent changes to SCQF qualifications, including creating new vocationally oriented courses and changes to national courses, mean that comparison in attainment rates with years over a long period is complex and could be erroneous (Scottish Government, 2021[5]). In 2020,

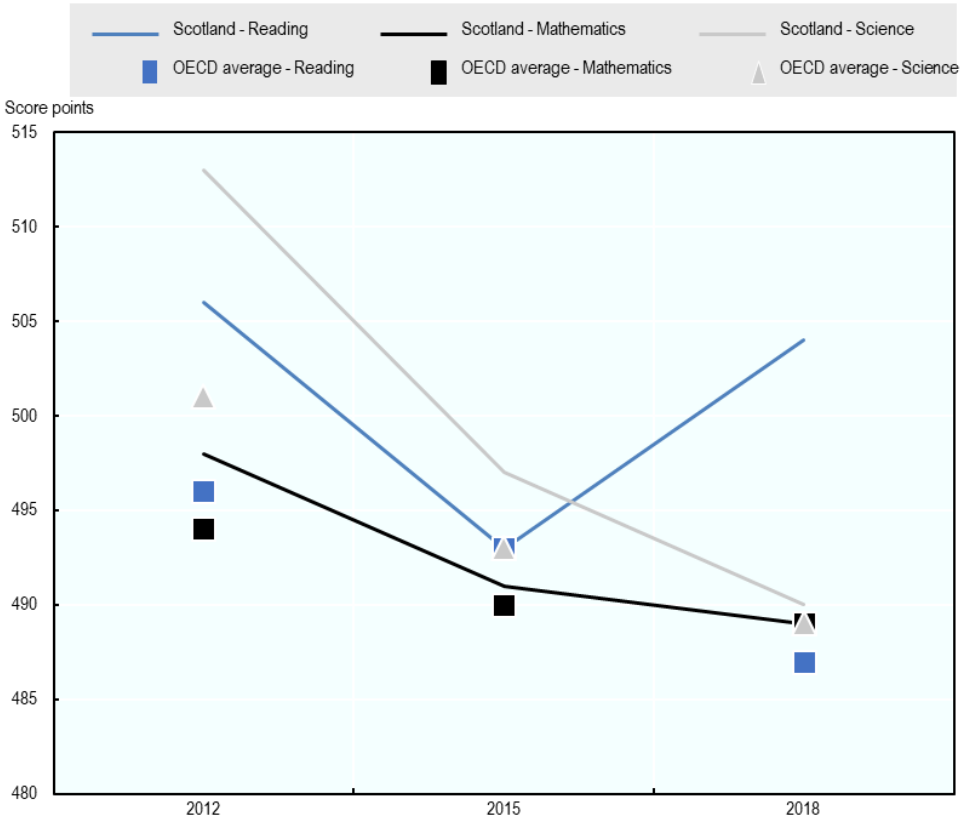
the COVID-19 pandemic led to the cancellation of National 5, Higher, and Advanced Higher exams and to the decision by the SQA not to collect nor mark coursework. Grades in these qualifications in 2020 were instead based on teacher estimates. The authors purposefully chose to analyse data from years before 2020 to control for the effect of the COVID-19 crisis on Scotland's education system.

Student performance

15-year-olds' levels in reading, mathematics and science

Scotland has ranked among higher-than-average country performers on international assessments such as the Programme for International Student Assessment (PISA), usually scoring at or above OECD average in mathematics, reading and science. Scotland's average scores declined between 2009 and 2018, similarly to average OECD performance, and improved in reading and remained stable in mathematics and science between 2015 and 2018 (Figure 1.2).

Figure 1.2. Average performance in reading, mathematics and science in Scotland (United Kingdom) and the OECD average, PISA 2012-18



Note: The data for this figure was collected before Costa Rica became an OECD member. In 2015 changes were made to the test design, administration, and scaling of PISA. These changes add statistical uncertainty to trend comparisons that should be taken into account when comparing 2015 results to those from prior years. Please see the Reader's Guide and Annex A5 of PISA 2015 Results (Volume I): Excellence and Equity in Education (OECD, 2016) for a detailed discussion of these changes.
Sources: OECD (2019[16]), *PISA 2018 Results (Volume I): What Students Know and Can Do*, https://dx.doi.org/10.1787/5f07c754-en; OECD (2019[17]), "Results for regions within countries", https://dx.doi.org/10.1787/bad603f0-en.

StatLink https://doi.org/10.1787/888934240807

In 2018, Scotland's average score on the PISA test in reading was 504 score points, representing an 11 score-point improvement on its 2015 score, almost on par with its 2012 performance, and higher performance than the OECD average. In mathematics, Scotland performed at OECD average with 489 score points, similar to its 2015 scores but lower than 2012. In science, Scotland scored at OECD average (490 score points), with similar scores to 2015 and declining since 2012 (OECD, 2019[17]; OECD, 2019[16]). Scotland's performance on PISA 2018 relative to OECD countries and economies improved in reading (only 5 OECD countries and economies outperformed Scotland, compared to 13 in 2015); it stayed similar in science (outperformed by 13 OECD countries and economies); and declined in mathematics (outperformed by 18 OECD countries and economies, compared to 14 in 2015) (Scottish Government, 2019[18]; Scottish Government, 2016[19]).

In 2018, Scotland's proportion of top performers in reading (10.3%) was higher than in 2015 and higher than the OECD average (8.7%), while the proportion of low performers (15.5%) was similar to 2015 and smaller than the OECD average (22.6%). Scotland's proportions of top performers were slightly higher than the OECD average in science and close to average in mathematics (slightly over 10%), both similar to the respective proportions in 2015. The proportions of low performers were close to OECD averages in mathematics (23.5%) and science (21.1%), and also similar to the respective proportions in 2015 (OECD, 2019[16]).

Students' progress in the system is assessed as part of ongoing learning and teaching, both periodically and at key transitions, with the first formal assessment for qualifications, including examinations taken around the age of 15 and at the end of the Senior Phase. BGE has five levels of progression (early, first, second, third and fourth) that approximately correspond to system levels of pre-school to lower-secondary education. Achievement of a level is based on teachers' overall professional judgement and informed by a range of evidence, against the benchmarks defined for each curriculum level. The Senior Phase represents the sixth level of progression in CfE. Based on the annual assessment of achievement of CfE levels, 72% of P1, P4 and P7 learners (combined) achieved expected levels in literacy and 79% in numeracy. In secondary education, 88% of S3 learners achieved the expected level in literacy and 90% in numeracy (Scottish Government, 2021[5]).

15-year-olds' levels in global competences

PISA's new global competence module aims to capture the capacity of 15-year-olds to examine local, global and intercultural issues, to understand and appreciate the perspectives and world views of others, to engage in open, appropriate and effective interactions with people from different cultures, and to act for collective well-being and sustainable development.

Scotland ranked among the top-performing countries in global competence. It scored higher (with a mean score of 534) than its expected outcomes based on its average results in reading, mathematics and science. Scotland was the fourth top-performing country, behind Singapore, Canada, and Hong Kong (China), with mean performance scores more than 50 points above the overall average (of 474 points). While differences in average performance across countries and economies were large, the gap between the highest performing and lowest performing students within each country was even larger. Scotland was among the countries and economies whose variations in performance scores between students were the largest, along with Canada, Israel, Malta, and Singapore, exceeding 100 score points, compared to an average of 91 points (OECD, 2020[20]).

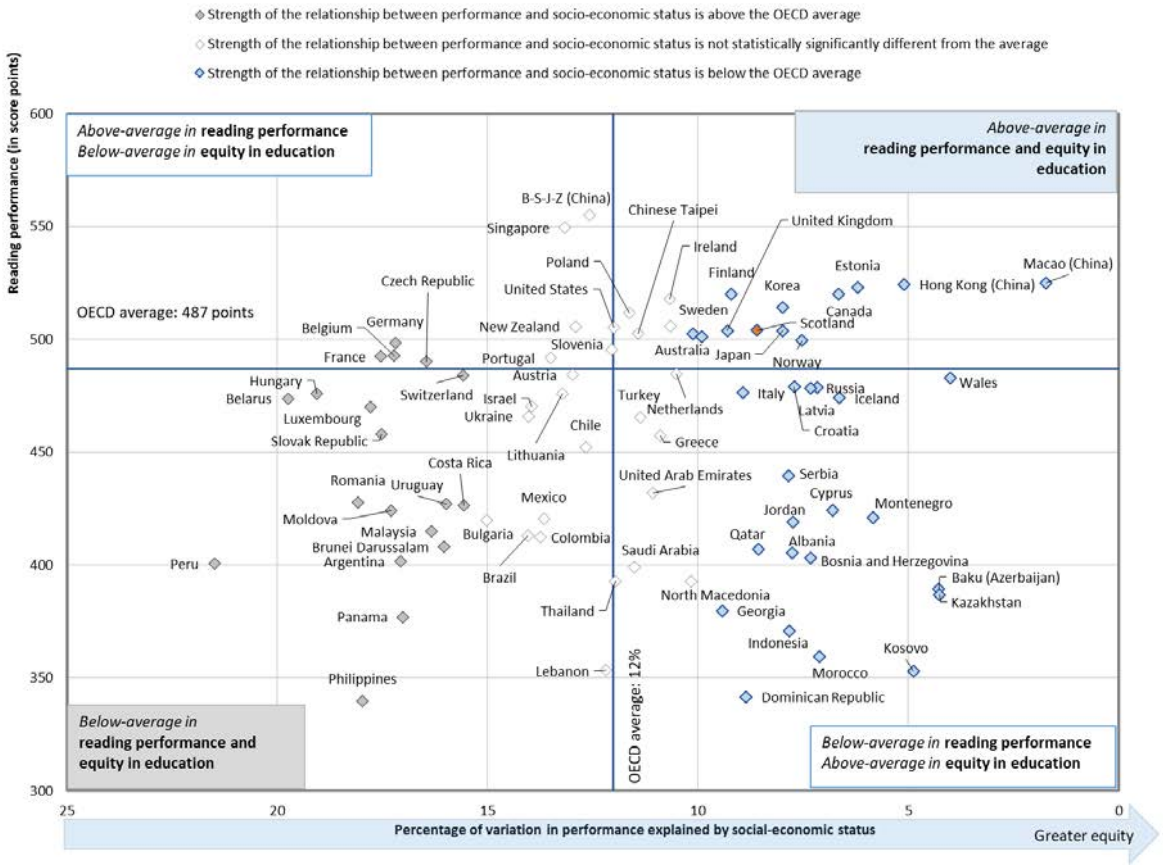
Scotland was the third country with the largest proportion of students who scored at Level 5 (12%), behind Singapore (22%) and Canada (15%). This is significantly higher than the average of 4% of students. At Level 5, the highest level of proficiency in global competence, students can analyse and understand multiple perspectives. They can examine and evaluate large amounts of information without much support provided in the unit's scenario. Students can effectively explain situations that require complex thinking and extrapolation and can build models of the situation described in the stimulus (OECD, 2020[20]).

Equity

Students' socio-economic status has a relatively small impact on their performance in Scotland, compared to other OECD countries and economies. The extent of socio-economic disparities in academic performance indicates whether an education system helps promote equality of opportunities. Figure 1.3 shows that in Scotland, students' socio-economic status had relatively little impact on their reading performance than other OECD countries. In 2018, the socio-economic status as measured by the PISA index of economic, social and cultural status (ESCS) explained only 8.6% of the difference in performance between students from the most and least advantaged backgrounds in Scotland. This means students' socio-economic status had a smaller impact on their performance in Scotland than on average across the OECD, where the ESCS explained 12% of the difference in performance. The impact of students' socio-economic status on their PISA performance in maths and science was also smaller in Scotland than on average in the OECD area, explaining 7.9% of the performance difference in maths, compared to 13.8% on average, and 10.1% of the performance difference in science compared to 12.8% on average (OECD, 2019[21]; OECD, 2020[22]).

Figure 1.3. Equity and reading performance, PISA 2018

Equity measured by the strength of the socio-economic gradient



Note: The data for this figure was collected before Costa Rica became an OECD member. B-S-J-Z (China) stands for Beijing, Shanghai, Jiangsu and Zhejiang (China).
Source: OECD (2019[16]), *PISA 2018 Results (Volume I): What Students Know and Can Do*, https://dx.doi.org/10.1787/5f07c754-en; OECD (2019[17]), "Results for regions within countries", https://dx.doi.org/10.1787/bad603f0-en.

StatLink https://doi.org/10.1787/888934240826

In 2018, the proportion of disadvantaged students who were academically resilient was higher in Scotland (13.9%) than on average across OECD countries and economies (11.3%). This marks the overall progress made on academic resilience since 2012, both in Scotland and on average. The difference in performance is significant (32 score points) between students at the top and bottom quarters of socio-economic status in Scotland, although still below the OECD average (37 score points) (OECD, 2019[21]).

PISA 2018 data suggest that the variation around Scotland's mean reading score is largely explained by factors other than school characteristics. The average score-point variation in reading performance is largely due to within-school variation (84.8%, above the OECD average of 71%). Only a very small percentage is explained by between-school variations (8.1%, compared to 29% on average) (OECD, 2019[21]).

On PISA's global competence module, the difference between advantaged and disadvantaged students' scores in global competence was larger than 80 score points in Scotland but was not significant after taking into account students' performance in reading, mathematics and science. The findings show that advantaged students (those in the top quarter of the PISA index of economic, social and cultural status) have access to more learning opportunities than disadvantaged students in Scotland, as is the case in 31 of 64 participating countries and economies.

At the system level, Scotland uses three indicators to measure the attainment gap between the proportion of school students from the most and least deprived areas of Scotland:

- At SCQF Level 4 or better, 98.8% of students from the least deprived areas attained one pass or more in 2018/19. This compared to 92.1% among those from the most deprived areas. The attainment gap was therefore 6.7 percentage points, up from 6.1 percentage points in 2017/18 and down from 11.3 percentage points in 2009/10 (the first year for which comparable statistics are available).
- At SCQF Level 5 or better, 94.6% of students from the least deprived areas attained one pass or more in 2018/19. This compared to 74.4% among those from the most deprived areas. The attainment gap was therefore 20.2 percentage points, down very slightly from 20.3 percentage points in 2017/18, with attainment having decreased among students from both the most deprived and least deprived areas. The attainment gap in 2009/10 was 33.3 percentage points.
- At SCQF Level 6 or better, 79.3% of students from the least deprived areas attained one pass or more in 2018/19. This compared to 43.5% among those from the most deprived areas. The attainment gap was therefore 35.8 percentage points, down from 37.4 percentage points in 2017/18, with attainment having decreased among students from both the most deprived and least deprived areas. The attainment gap in 2009/10 was 45.6 percentage points.

Interestingly, learners in Scotland living in accessible rural areas are the most likely overall to achieve SCQF Level 6 or better (62.8%), while learners in remote rural areas are the most likely to achieve at SCQF Level 5 or better (87.9%) in 2018/19, compared with other areas. The least likely to achieve those levels are learners in remote small towns and urban areas classified as "other than large" (Scottish Government, 2020[15]).

School environment, health and well-being

Improving children and young people's health and well-being is one of the Scottish Government's key priorities. Students report more often being exposed to bullying in Scotland than on average across OECD countries and economies (index of 0.23 for a basis 0 on average). A larger share of students are bullied frequently (11.4% compared to 7.8%). The disciplinary climate in regular classes is similar in Scotland to the average climate across OECD countries and economies (index of 0.07). The large majority of students declare that situations that are unconducive to learning occur "never or hardly ever" or "in some lessons"

only, including when students do not listen, when there is noise, or when students or teachers need to wait before class starts (OECD, 2019[23]; OECD, 2020[24]).

Competition between students seems to be slightly more common in Scotland than co-operation. In 2018, some 73% of students reported that it seemed "very" or "extremely true" to them that students were competing against each other, whereas only 61% said they observed co-operation among students. Students in Scotland also reported that their schoolmates seemed to value competition more than co-operation (OECD, 2020[24]). This was in opposition with the attitude across OECD countries and economies, where competition between students was on average less observed (50%) than co-operation (62%) (OECD, 2019[23]).

Students in Scotland report slightly lower life satisfaction than the OECD average and more prevalent fear of failure than average. The sense of belonging to one's school is slightly less strong in Scotland than on average across OECD countries and economies (OECD, 2020[24]). On a final note, students in Scotland display a growth mindset more often than on average across OECD countries and economies (OECD, 2019[23]).

Governance and funding

Scotland has a long tradition of organising its own education system and wields full legislative power and executive authority in all areas of education since the Scotland Act of 1998. In the current government, the Cabinet Secretary for Education and Skills is also the Deputy First Minister and has overall responsibility for Scottish education, in collaboration with supporting ministers sharing responsibilities in specific areas, and with support from relevant administrations, including the Learning Directorate. The Scottish Government, via the Cabinet Secretary for Education and Skills, sets broad policy for all aspects of education in Scotland. Curriculum for Excellence (CfE) is the framework for curriculum policy set at the central level, upon which schools and practitioners build their own curriculum, adapted to the needs of their learners and their local context.

The Learning Directorate works with statutory agencies to implement policies, including Education Scotland (responsible for educational improvement and inspection), the Scottish Qualifications Authority, Skills Development Scotland (SDS) and the Scottish Funding Council (funding teaching and research in higher and further education). Since it was established in 2011, Education Scotland inherited the full range of functions to support educational quality and improvement, including the inspection and review functions formerly held by the independent Her Majesty's Inspectorate of Education (HMIE). Education Scotland's Chief Executive Officer also fulfils the responsibilities of Chief Inspector of Education with a view to linking quality assurance with educational improvement support. A dedicated strategic director has specific responsibility for inspection standards.

Her Majesty's (HM) Inspectors of Education perform inspections and reviews all sectors of Scottish education to provide quality assurance of learning and educational standards, gather evidence to inform HMIE advice to ministers, and build capacity through the system by collaborating and sharing practices with practitioners. Schools perform self-evaluations based on Education Scotland's guidance, with support from their local authority, which inform external school inspections performed on a sample of about 240 schools every year. Individual inspection reports and summaries of inspection findings are published on Education Scotland's website along with recommendations for support, if needed, by the school's local authority.

Responsibility for organising, operating and staffing the school system within the Scottish Government's policy guidelines is decentralised. The 32 local authorities, run by councils elected every four years, deliver a wide array of services, including schools, housing and social work, and are committed to pursuing national educational objectives. The local authorities have direct responsibility for schools, hiring school staff, providing and financing most educational services and implementing Scottish Government policies

in education. Local authorities help schools design and implement their curriculum based on the CfE framework.

In 2017, Scotland introduced a new layer of educational governance by establishing six Regional Improvement Collaboratives (RICs) across the country to bring local authorities together alongside the central administration, and collaborate more effectively for greater equity and quality in education. Each RIC provides an annual regional plan and work programme aligned to the National Improvement Framework (NIF). They are led by a regional improvement lead, appointed by a joint steering group made up of officials from both the Scottish Government and local authorities. The regional improvement lead is to be formally managed by the chief executive of the employing local authority while reporting to all collaborating local authorities and the HM Chief Inspector and Chief Executive of Education Scotland. This followed an OECD recommendation made in 2015 to "strengthen the professional leadership of CfE and the 'middle'". The recommendation invited Scotland to shift the system's centre of gravity towards schools and their local communities, including by fostering mutual support and learning across local authorities and networks of schools, and giving them a more prominent role as part of a "reinforced middle" (OECD, 2015[4]).

Local authorities fund schools via local funding, except for specific funding of national programmes such as the pupil equity funding. Since 2007, education funding has been rolled into the local government settlement, leaving local authorities to prioritise funding and allocate budgets. The Scottish Government provides 70% of all local government revenue, while the remaining 30% are business rates and council tax levied on residents. In terms of gross revenue expenditure across pre-school, primary, secondary, special school and non-school funding in 2018/19, GBP 5.5 billion was spent in total on all education levels in Scotland, an increase of 4.9% in real terms since 2013/14. The Scottish Government allocates specific resources, including for CfE-related spending (GBP 12.3 million in 2019/20). Local authorities devolve the management of some expenditures to the school level, leaving school leaders to make decisions about the use of at least 80% of school-based funding. Devolved School Management Guidelines were revised in 2012 to empower school leaders to meet local needs and deliver the best possible outcomes for young learners, in line with several Scottish policy objectives of CfE, Getting it right for every child (GIRFEC) and the Early Years Framework (Scottish Government, 2021[5]).

Schools are responsible for the quality of education they offer to their students and are accountable to their local authority, including publishing annual improvement plans based on objectives set with their local authority. Schools' responsibility to ensure the quality of education and their ability to design their own curricula to meet learners' needs increased with the implementation of education policies such as CfE and the Empowerment Agenda in Scotland. Based on the national CfE framework, individual schools develop their own "curriculum rationale", which forms the basis of a school's approach to addressing learning needs. Rationales are expected to be developed with staff, parents, carers, local partners and youth in the school community.

Education policies

Curriculum for Excellence

Curriculum for Excellence, introduced for its first phase of implementation in schools in 2010, caters for children aged 3 to 18 years, with what is commonly known in Scotland as Broad General Education (early learning, primary and lower-secondary levels) followed by the Senior Phase (three years of upper-secondary education). The philosophy of CfE is that of a future-oriented education, aiming to help students develop into successful learners, confident individuals, responsible citizens and effective contributors (referred to as the "four capacities").

CfE defines curriculum as all the learning planned for children and young people from early learning and childcare, through school and beyond. Learning aims to be holistic and centred on the learner, and students are expected to develop knowledge, skills and attitudes inherent to the four capacities. The CfE framework encompasses four contexts for learning: eight curriculum areas, interdisciplinary learning, ethos and life of the school, and opportunities for personal achievements. CfE enables school communities to design their curriculum, and teachers are encouraged to teach in the way they esteem best suited to their students' needs. The conception of teacher as curriculum developer was relatively new when first implemented in Scottish schools. Schools and local authorities were encouraged from the beginning to innovate and find local approaches to planning and delivering the curriculum within the framework provided centrally.

Scotland's Curriculum for Excellence was a ground-breaking curriculum policy when it first took shape in the early 2000s. In 2000, the Standards in Scotland's Schools etc. Act 2000 set the principles that education should be directed to the development of children's and young persons' personality, talents and mental and physical abilities to their fullest potential, and that youth's views should be taken into account in decisions that significantly affect them. A national debate (2002) concluded that one educational priority was to align curriculum to these aspirations, and the first statement of intent for a new Curriculum for Excellence was subsequently published in 2004.

CfE was further shaped over several years: a *Building the Curriculum* series developed the parameters of CfE in collaboration with national and local partners until 2010. Changes to the national regime of qualifications and discussions around student assessment later aimed to align assessment and examination approaches with CfE, along with a number of additional policies developed subsequently. Scotland spent almost a decade preparing its implementation by schools in 2010, when it was mainstreamed across the country.

In 2015, an OECD review of Scotland's Broad General Education concluded that CfE was a "watershed" moment for education in Scotland, widely supported and exemplified in some schools' inspiring curriculum experience, but that it required ongoing efforts to turn it into a reality for all students in the system. At the time, the OECD review acknowledged that the foundations of CfE had been set, including curriculum building blocks, assessments and qualifications, and adjustments to teacher education, leadership and the support structure. The consensus around CfE was deeply rooted, and the teaching profession was progressively taking ownership. Challenges remained, however, including a lack of clarity in the nature of CfE (was it a curriculum or a reform package?) and a risk of adopting a "wait and see" approach that would hinder CfE and its development in schools. The review proposed a number of detailed recommendations. Those directly linked to CfE are summarised here (the detail can be found in the full report) (OECD, 2015[4]):

- To ensure equity and quality, develop metrics that do justice to the full range of CfE capacities informing a bold understanding of quality and equity.
- To strengthen decision making and governance, 1) create a new narrative for Curriculum for Excellence; 2) strengthen the professional leadership of CfE and the "middle"; and 3) simplify and clarify core guidance, including in the definitions of what constitutes Curriculum for Excellence.
- To enhance schooling, teaching and leadership, focus on the quality of implementation of CfE in schools and communities and make this an evaluation priority.
- To improve assessment and evaluation, strike a more even balance between the formative focus of assessment and developing a robust evidence base on learning outcomes and progression.

The Scottish Government received these recommendations and used them as input into further policy development of CfE. The main actions taken as a result are summarised below and are analysed to a larger extent in Chapters 2-5 of this report:

- The guidance framework for the BGE curriculum was updated (including the development of CfE Benchmarks and publication of a Statement for Practitioners in 2016), and a "refreshed curriculum

narrative" was published in 2019 as a response to the call for a new CfE narrative and simplified guidance.

- National oversight and management arrangements for the curriculum framework were adjusted in 2018/19 in an attempt for more collaborative and systemic implementation.
- The quality and equity of CfE implementation in schools were made the focus of sampled inspection, and a number of tools, action plans and strategies were developed to enhance CfE implementation and to increase engagement in secondary schools.
- The Scottish Attainment Challenge was developed in 2015, and the National Improvement Framework in 2016 to promote and monitor equity and quality across the education system.

Additional policy developments that go beyond the scope of CfE, but affect its environment, are reviewed in the following sections. This new OECD review provides the opportunity for an external assessment of progress in terms of its implementation in both BGE and the Senior Phase, in light of current experience and international evidence to adapt and update it for the future.

Main education policies and priorities around Curriculum for Excellence

Getting it right for every child

Getting it right for every child was introduced in 2006. It provides a framework for all professionals working with children and youth to enforce children's rights and guarantee children's well-being holistically and across services. The Scottish Government decided in 2019 that the best way to promote and embed GIRFEC further was in partnership with local delivery partners, through practical help, guidance and support, and not on a statutory basis. The Scottish Government is therefore refreshing GIRFEC policy with those partners and developing new practice guidance on the key components of GIRFEC. Along with CfE and Developing the Young Workforce: Scotland's Youth Employment Strategy (DYW), GIRFEC is a pillar of Scotland's commitment to inclusive education. GIRFEC policy has been undergoing revisions since 2019 (new guidance) to allow for more partnership work between local delivery partners and the Scottish Government.

Early childhood care and education

Realising the Ambition: Being Me was published in February 2020 as an update to national practice guidance for the ECEC sector (*Building the Ambition*, 2014 and *Pre-birth to Three*, 2010). The policy reflects CfE curriculum guidance for ECEC based on national and international research in early childhood. It provides pedagogy and practice guidance for practitioners working with young children, also in alignment with other policies (e.g. GIRFEC) (Scottish Government, 2021[5]).

Scottish Attainment Challenge

As part of the SNP's programme for government in 2016, the First Minister set her government the mission "to close the poverty-related attainment gap between children and young people from the least and most disadvantaged communities." The Scottish Attainment Challenge was developed to this end in 2015, with GBP 750 million over five years to support schools and local authorities in improving literacy, numeracy and health and well-being in a way that would "close the gap". Following implementation of the Scottish Attainment Challenge, the Scottish Government provided some evidence of impact from several performance and evaluation reports published in 2019 (Scottish Government, 2021[5]):

- The gaps between school leavers from the most deprived and least deprived areas achieving one pass or more at SCQF Levels 3 or better, 4 or better, 5 or better and 6 or better have reduced between 2009/10 and 2017/18.

- Attainment among the most disadvantaged children and young people rose in numeracy at all stages and in reading and writing at P1, P4 and P7. The attainment gap between the most and least disadvantaged has narrowed on most indicators.
- Some 88% of headteachers reported improvements in closing the poverty-related attainment gap due to interventions supported by the Attainment Scotland Fund, and 95% expect to see improvements over the next five years.

Developing the Young Workforce: Scotland's Youth Employment Strategy

In 2014, Developing the Young Workforce: Scotland's Youth Employment Strategy set out to reduce youth unemployment levels by 40% by 2021. The strategy aims to create a work-relevant, school-based curriculum offer for young people in Scotland, informed by the needs of current and anticipated job markets. This includes embedding career education for children aged 3 to 18 years, offering formal careers advice at an earlier point in school, embedding employer engagement in education, creating new work-based learning offers and widening learner pathway options for young people in their Senior Phase. New learner pathway options include a wider apprenticeship offer for young people with Foundation Apprenticeships (SCQF Level 6) and Graduate Level Apprenticeships in place and Levels 4 and 5 in development. Implementation of DYW required schools to include the strategy as part of their curriculum development, thus creating direct links with CfE (Scottish Government, 2021[5]).

Teacher policies

A review of teacher education published in 2010 (Donaldson, 2010[25]) concluded that the two most important and achievable ways in which school education can realise the high aspirations Scotland has for its young people are supporting and strengthening the quality of teaching and leadership. The publication, *Teaching Scotland's Future*, highlighted the importance of sustained teacher professional learning and development in improving outcomes for young people. It also emphasised the importance of career pathways in supporting teacher recruitment and retention. The review led to wider recognition of the importance of quality professional learning and good educational leadership while providing a basis for professional update. It also reinforced the place of masters studies for teachers, increasingly common at all levels of the profession. A wide range of new forms of initial teacher education programmes also appeared in Scotland towards the end of the decade, aimed at helping to address recruitment challenges for teachers in priority subjects and the remote and rural areas of Scotland. Work to develop teacher career pathway models was conducted from 2017 to 2020. It was delayed by the COVID-19 crisis and implementation originally scheduled for August 2021 might also be delayed (Scottish Government, 2021[5]).

Leadership

The Scottish Government has prioritised developing teacher and school leadership in recent years, including developing a broader offer of professional learning and the new requirement for school leaders to hold the Standard for Headship, a new qualification. The mission to clarify and bring coherence to educational leadership in Scotland, previously held by the Scottish College for Education Leadership, was transferred to Education Scotland and its Professional Learning and Leadership Directorate in 2018. Education Scotland started an evaluation process to inform developments of the professional learning offer and committed to collaborating with Regional Improvement Collaboratives, local authorities and the Learning Directorate in this endeavour (Scottish Government, 2021[5]).

New national courses and revised national qualifications

The Scottish Qualifications Authority, in collaboration with stakeholders, designed new national qualifications in the attempt to align them with CfE and to support learners' achievement in developing the four capacities and the skills for learning, life and work that underpin them. The new national courses and

qualifications aim to provide high standards and a formal acknowledgement of learners' achievements while ensuring at the same time continuity with the breadth and depth of learning sought at earlier levels of CfE. The new national courses were first introduced in 2013/14, then revised and implemented as the revised national qualifications between 2016 and 2019, following concerns that the new structure and practice of national courses resulted in an overload of assessment (Scottish Qualifications Authority, 2021[26]; Scottish Government, 2021[5]). The number of qualifications registered in the SCQF beyond those awarded by the SQA also grew due to the Scottish Government's promotion of the diversification of possible pathways and qualifications for learners.

SQA qualifications at SCQF Level 5 include the National 5 Award, Skills for Work National 5, the National Certificate and the National Progression Award. Level 6 qualifications include the SQA's national courses at Higher level, as well as Skills for Work Higher and other Awards and Certificates. At SCQF Level 7, SQA qualifications include Advanced Higher, the Scottish Baccalaureate, as well as Awards, Higher National and Advanced Certificates.

In broad terms, Higher qualifications are considered the Scottish equivalent to English A-Levels, but they are not identical. Some notable differences are that Scottish Highers are one-year courses, whereas A-Levels take two years to complete; students in Scotland get a smaller range of subjects to choose from at Higher and Advanced Higher levels than in England for A-Levels; and students tend to take more Highers in Scotland than A-Levels in England if they plan to apply for higher education, and they have the option of taking Advanced Highers. The number of University and Colleges Admissions Service (UCAS) points awarded by each grade also differ between the two types of qualifications, the A-Levels' grades A* and A corresponding to Scottish Advanced Higher Grades A and B, respectively (Table 1.3).

Table 1.3. Number of UCAS points awarded by qualifications, Scotland and England (United Kingdom)

	Scottish Higher	Scottish Advanced Higher	English A-Levels
Grade A*	Not applicable	Not applicable	56 points
Grade A	33 points	56 points	48 points
Grade B	27 points	48 points	40 points
Grade C	21 points	40 points	32 points
Grade D	15 points	32 points	24 points

Source: UCAS (2021[27]), "Calculate your UCAS tariff points", https://www.ucas.com/ucas/tariff-calculator [accessed on 27 April 2021].

The National Improvement Framework

The National Improvement Framework was developed in 2016 with the ambition to "make Scotland 'the best place to grow up and learn'" and to complement the existing pillars of the Scottish education system: CfE, GIRFEC and DYW. The NIF aims to structure a system and collaborative approach to educational improvement to pursue two key targets: achieving excellence through raising attainment and achieving equity by ensuring that all children have the same opportunity to succeed. The NIF sets out a holistic view of the education system, bringing together evidence and information from all levels and on all aspects that impact performance.

A new national data collection system provides additional information at the school, local and national level about children's progress in literacy and numeracy, based on teachers' assessment of progress. To support teachers in making judgements, the Scottish Government has introduced benchmarks for greater clarity on national standards as well as expanding opportunities for professional dialogue around standards through the Regional Improvement Collaboratives.

In 2019, local authorities reported that teachers feel increasingly confident when assessing progress. From 2018, Scottish National Standardised Assessments provide an additional source of objective, nationally consistent evidence. These assessments occur in primary school (ages 5, 8 and 11) and lower-secondary (age 14). Since 2016, attainment in the Achievement of Curriculum for Excellence levels has been published annually to provide key data regarding children's literacy and numeracy progress (OECD, 2019[28]).

Tensions around Curriculum for Excellence that impact student learning

This OECD assessment aims primarily to understand how CfE is implemented in BGE and the Senior Phase and to what extent it contributes to an education of quality for all young people in Scotland. As the scope of the assessment was agreed upon, a number of issues cutting across the Scottish education system were raised by the Scottish Parliament and Government, as well as by the OECD team. These issues arise from the need to find a balance between many parameters in Scotland's complex education system and have implications for how CfE is implemented in the current policy context. The issues are reviewed below as part of the broader context and provide a useful backdrop for the analysis presented in the following chapters:

- **Tensions found between local curriculum flexibility and the need for coherence to achieve system-wide objectives**: By design, CfE enshrines the principle of local curriculum flexibility since it gives schools the autonomy to design their own curriculum to best respond to students' needs. CfE committed to school empowerment in a system already characterised by strong policy leadership from the centre and assertive local governments. At the same time, concerns arise in the public debate about whether the variability that inevitably characterises schools' curricula effectively provides an excellent education for all learners or if it might increase educational inequalities. This also touches upon the issue of what level and kind of support schools might need to design curricula of high quality while respecting teachers' and school leaders' working time.
- **Tensions in the understandings of breadth and depth of learning**: Opposed in the public debate, breadth and depth of learning seem not to have the same definition for the various stakeholders. Stakeholders interviewed by the OECD team tended to reflect this tension in the opposition between Broad General Education and Senior Phase, but the lack of clarity around the concepts poses many questions. For instance: does breadth refer to the number of subjects taken by students, and depth to the time allocated to each; or do they both refer to specific pedagogical approaches; are they exclusive or can they be complementary, and many more.
- **Tensions in the conceptualisation of knowledge, skills and competencies**: Although CfE was developed to promote the acquisition of knowledge, skills and attitudes, the public debate as observed by the OECD team in Scotland throughout discussions tends to oppose knowledge and skills. Some also observed that while BGE was focused on the combination, the Senior Phase may still be focused on disciplinary knowledge (defined as subject-specific concepts and detailed content (OECD, 2019[29])). The OECD's Future of Education and Skills 2030 project describes the integration of knowledge, skills, attitudes and values (integrations referred to as "competencies") that enables students to perform in ill-defined environments, thus allowing them to navigate a fast-paced and uncertain world. The definition of competencies as integrative and with a broad performance orientation allows the debate to shift away from the traditional "knowledge versus skills" focus by acknowledging the importance of both in learning.
- **Tensions between curriculum, student assessment and evaluation**: There is an apparent (mis)alignment between curriculum, assessment and evaluation policies, especially at the Senior Phase. This tension was raised throughout the meetings of the OECD team in Scotland as one of the key issues that needs to be reviewed for CfE to perform at its best. These policies have complex

relationships across numerous education systems, requiring alignment in their design as well as their implementation (OECD, 2013[30]; Gouëdard et al., 2020[2]; OECD, 2020[31]).

Some of these tensions likely arose throughout the development and the ten years of implementing CfE due to a combination of the ambition of the policy and the principle of flexibility embedded in CfE. Yet, some of these are inherent in the design of CfE itself, as it allows for flexibility in the interpretation of the principles and actions to make CfE happen on the ground across Scotland.

These tensions may affect the learning experiences of students across the country. They may vary in terms of the curriculum, as teachers have great freedom and may be overloaded in terms of course choices in some places with much less offer in other regions. When learners move up to Senior Phase, they have different types of assessments in relation to the type of learning they are experiencing in Broad General Education. Finally, students may have challenges finding the right balance in developing their knowledge and broader competencies. To resolve these tensions, it is necessary for Scotland to pinpoint where it wants to be on each of these, for CfE to reach its full potential and allow Scottish education to offer an education of excellence to all its learners.

Conclusion

The variable progress made in different education outcomes indicators, ten years of experience with CfE in schools, and the impact of the COVID-19 pandemic on the society, economy and education provide a good opportunity to review how CfE was implemented and what can be done for it to continue to deliver quality learning for all students across Scotland. Education system performance in Scotland presents a variable picture: while PISA results had declined between 2009 and 2015 (following the OECD average), they improved in reading and remained stable in mathematics and science between 2015 and 2018. At the same time, Scottish students have been among the top performers in global competences, which measure their capacity to interpret worldviews, to engage effectively in interactions with people from different cultures, and to act for collective well-being and sustainable development. In addition, there has been an increase to 95% in the positive destinations of those leaving schools in 2019 (considered in Scotland in relation to higher and further education, employment and other positive destinations).

In terms of equity, there has been an apparent improvement for disadvantaged students. According to PISA, the impact of students' socio-economic status on their performance in reading, maths and science is among the lowest across OECD countries. At the same time, there is a higher proportion of resilient students (students from disadvantaged backgrounds who perform at high levels). Scottish data show an improvement in the performance of disadvantaged students in SCQF Levels 4, 5 and 6, with lower performance for those living in small towns in relation to rural areas.

Student well-being at age 15 shows a mixed picture, with higher levels than OECD average in bullying, in competition and in anxiety, and lower student well-being. At the same time, students report they experience a higher-than-average growth mindset. It is important to note that students at age 16 take their national exams, which are high stakes in terms of their next educational steps.

To achieve these outcomes, the system is organised around a mostly public provision of education for 3 to 18 year-olds. Education beyond lower-secondary levels offers a range of choice for students, both in schools, colleges of further education and other educational settings, which can be combined. Teachers appear high quality in terms of requirements for entry into the profession and availability of support and professional development. School leaders have new supports in place to exercise their roles.

Students are engaged in learning through Curriculum for Excellence, which was introduced in schools from 2010. CfE aims to provide a holistic approach to learning, to develop knowledge, skills and attitudes. To support CfE and the education system, the Scottish Government has introduced a range of policies and strategies for schools, for education professionals, and to drive system performance to higher levels.

After ten years since its first implementation across schools, a range of issues and tensions have become apparent, highlighted by the Scottish Parliament and Government and other education stakeholders. Indeed, policies need constant revision and adjustment, and this ten-year timeline is an opportunity to review CfE and its implementation from a student perspective: how students progress through the system, especially in the transition from lower-secondary into Senior Phase with CfE.

The ambitions of CfE are to enable each child or young person to be a successful learner, a confident individual, a responsible citizen and an effective contributor. With ten years of practice with CfE in schools, how do students live CfE and their learning as they progress through the system? The analysis undertaken in this report reflects on how CfE has and can deliver the best possible learning experience to prepare students for their future by looking at CfE and its change approach. To respond, the following chapters reflect on:

- How has CfE been implemented from a student perspective? Is the CfE design working well for all students as they progress and transition through the system?
- How have those shaping CfE been involved, and how can they engage most productively to continue delivering the best possible CfE?
- How has the policy environment contributed to CfE reaching all schools consistently?
- Has there been a clear and well-structured implementation strategy for CfE from its inception?

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Note

1. The authors purposefully chose to analyse statistics and other quantitative data from years prior to 2020, to control for the effect of the COVID-19 crisis on Scotland's education system, since the focus of this report is on trends and processes that predate the pandemic. Unless the phenomenon analysed is directly linked to the crisis, the latest school year of reference used for statistics is thus 2018/19.

2 The design and implementation of Scotland's Curriculum for Excellence

This chapter analyses the design of Scotland's Curriculum for Excellence (CfE) and how it has been implemented since its inception in 2000. It analyses the progress made and potential gaps between the original intent and actual practice. The chapter starts with a description of CfE, follows with a review of its vision, its policy development in relation to student learning and progression from primary through to secondary education and Senior Phase, and its assessment. It examines the resources invested and concludes with a summary of issues for consideration.

Introduction

Scotland's Curriculum for Excellence (CfE), a remarkable curriculum initiative that was set in motion in the early 2000s, remains an inspiring curriculum policy in theory and practice in schools today. Its vision offers the rationale for rethinking curriculum intentions and shifting emphasis in teaching and learning towards a more holistic approach that encompasses knowledge, skills, attitudes and values held by society.

Since its inception in 2000, CfE has made progress. Primary schools had the opportunity to pilot CfE approaches before all schools started rolling it out in 2010/11 (Kidner, 2013[1]), followed by secondary schools. Between 2014 and 2016, students were awarded revised Scottish Qualifications Authority (SQA) national qualifications for the first time. The first student cohorts who studied following the CfE framework from start to finish (aged 3 to 18 years) recently completed compulsory education.

Two decades since its inception presents a fair amount of time and evidence for reflection on progress made from policy to actual practice. It is challenging to know, however, whether CfE's implementation has resulted in all students accomplishing its objectives since its realisation from 2010 onwards. The difficulty comes first from the nature of policy implementation itself: a policy design rarely translates into faithful enactment, as those involved in practice interpret and enact the policy differently (Viennet and Pont, 2017[2]). This challenge is all the more frequent with policies, such as CfE, whose principles encourage design flexibility at the school level. Such flexibility allows for perhaps different variations than originally planned in the policy. In addition, the metrics to understand its accomplishments remain elusive. Understanding progress made requires an analysis of the curriculum as well as the process followed for its implementation.

"Curriculum" is an elusive concept, with dozens of interpretations in literature (Jackson, 1992[3]). Essentially, curriculum can be seen as a "plan or design for learning", with many possible representations and at many levels of education (van den Akker, 2003[4]). The analysis, here, of the interplay between the intended and implemented curriculum will focus on the perceptions and experiences of the learners (as the ultimate audience of the curriculum), with connections to the roles of teachers as main curriculum actors.

From a policy perspective, curriculum development is a highly dynamic enterprise, driven by numerous ideological considerations, interests and expectations – of many groups (Viennet and Pont, 2017[2]; Gouëdard et al., 2020[5]). Consequently, many actors and factors influence the processes and results of curriculum change, which can be observed in school organisations, classroom realities and student experiences and outcomes (Fullan, 2008[6]; Levin, 2008[7]). Many such dynamic forces are addressed in Chapters 3 and 4 of this report. This chapter analyses how elements of policy design have played out in the implementation of CfE and what can be done in the future to enhance these.

The findings are structured along three levers of the OECD Framework on Education Policy Implementation (as introduced in Chapter 1 and Figure 1.1): the policy is driven by a vision, offers coherent policy actions, and is adequately resourced to be implemented in a sustainable manner. The curriculum spider web (Thijs and van den Akker, 2009[8]) is further used to analyse the various components of CfE and their coherence.

An overview of Curriculum for Excellence and its components

Curriculum for Excellence caters for children aged 3 to 18 years in Scotland (United Kingdom). Early learning, primary and lower-secondary levels are grouped under Broad General Education (BGE), while the Senior Phase covers the three years of upper-secondary education. Following much work on its development, it was implemented across primary schools in Scotland from 2010 onwards, then in secondary schools. The Senior Phase was phased in from 2013/14 to 2015/16 (Scottish Parliament -

Education and Skills Committee, 2019[9]). As an overarching description of CfE and its development is provided in Chapter 1, this section describes the different components that currently shape CfE for schools and teachers.

The vision for Curriculum for Excellence was formulated in 2004 around the "four capacities" that represent the essential purposes of Scottish education (Figure 2.1). Scotland further specified attributes and capabilities, which students can cultivate throughout their education, in order to develop the four capacities (Figure 2.2).

Figure 2.1. The four capacities of Scotland's Curriculum for Excellence

Source: Scottish Government (2019[10]) "Refreshed Curriculum for Excellence narrative", https://scotlandscurriculum.scot/ [accessed on 18 January 2021].

In September 2019, following the 2015 OECD review recommendation to "create a new narrative for CfE", a refreshed narrative for Scotland's curriculum positioned CfE in the current context, explaining that Scotland's Curriculum for Excellence helps children and young people gain the knowledge, skills and attitudes needed for life in the 21st century. The four capacities remain at its centre, enabling all young people to become successful learners, confident individuals, responsible citizens and effective contributors. These capacities are seen as:

- reflecting and recognising the lifelong nature of education and learning
- recognising the need for all children and young people to know themselves as individuals and to develop their relationships with others, in families and in communities
- recognising the knowledge, skills and attitudes that children and young people need to acquire to thrive in our inter-connected, digital and rapidly changing world
- enabling children and young people to be democratic citizens and active shapers of that world.

Besides aiming for "excellence", the word "**all**" (children and young persons) in the vision underlines that CfE also explicitly aims at equity. This dual focus is aligned with international best practice, but, as discussed later, not without challenges.

Curriculum is a wide concept in terms of the definition used in CfE. It is the totality of all that is planned for children and young people from early learning and childcare, through school and beyond. CfE covers the entire schooling route from age 3 to 18 years and ultimately aims at "positive and sustained destinations" (in higher and vocational education, in the world of work and in personal life) following the schooling years.

CfE puts the learner explicitly at the centre of the curriculum and refers to four diverse contexts for planning learner experiences: the ethos and life of the school as a community; opportunities for personal achievement; interdisciplinary learning; and curriculum areas and subjects.

In the CfE philosophy, schools and teachers are considered and empowered to make the decisions needed to provide a coherent, flexible and enriched curriculum that is adaptable and responsive to the diverse needs of individual learners, and which reflects the uniqueness of their communities. This suggests an approach that gives wide autonomy to schools and their teachers in curriculum design.

Another way of summarising the intentions of CfE (as stated in policy documents) is that children and young people's rights and entitlements are central to Scotland's curriculum, and every child and young person is entitled to experience:

- a curriculum that is coherent from age 3 to 18 years
- a broad general education, including well-planned experiences and outcomes across all the curriculum areas from early years through to S3
- a Senior Phase after S3, which provides opportunities to attain and achieve, including to study for qualifications, awards and other planned activities to develop the four capacities
- opportunities for developing skills for learning, skills for life and skills for work, with continuous focus on literacy, numeracy, health and well-being
- opportunities to maximise their individual potential, benefitting from appropriate personal support and challenge
- support to help them move into positive and sustained destinations beyond school.

In terms of the content of learning, within the overall framework, "Experiences" and "Outcomes" describe the expectations for learning and progression in all areas of the curriculum. It is the responsibility of schools and their partners to bring those experiences and outcomes together and apply the national entitlements to produce learning programmes across a broad curriculum, covering the subjects of: Science; Languages; Mathematics; Social Studies; Expressive Arts; Health and Well-being; Religious and Moral Education; and Technologies. In addition, throughout this broad curriculum, there should be an emphasis on the Scottish context, culture and history, and its place in the world.

According to CfE, this planning should demonstrate the following principles for curriculum design:

- challenge and enjoyment
- breadth
- progression
- depth
- personalisation and choice
- coherence
- relevance.

The Curriculum for Excellence framework intends to allow professional autonomy and responsibility when planning and delivering the curriculum. For example, there are no specific input requirements in terms of time allocations. The framework provides flexibility to organise, schedule and deliver the experiences and outcomes in ways that meet the needs of all learners and also provide reassurance about consistency

where necessary. Such flexibility is expected to result in more varied curriculum structures and arrangements to reflect local needs and circumstances.

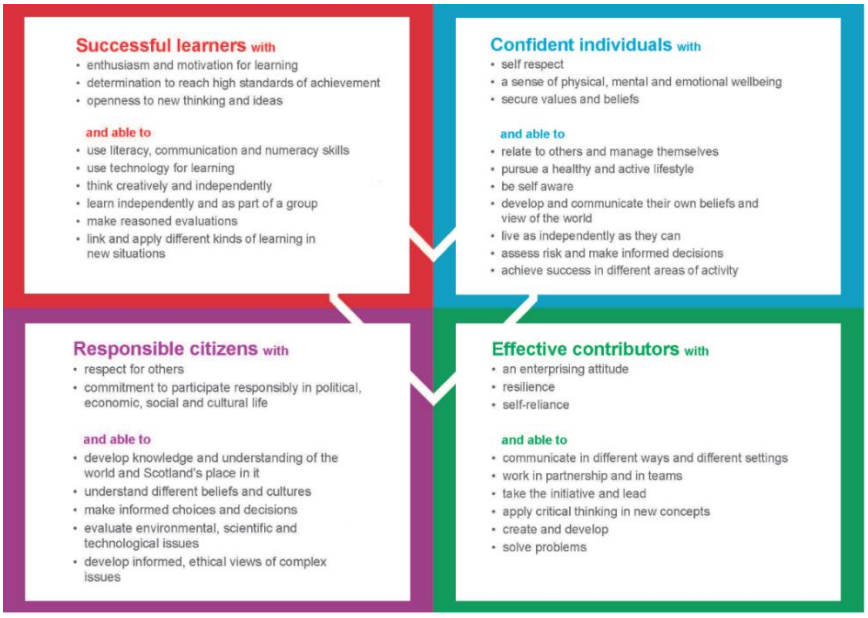
The Curriculum for Excellence vision as a driving force

The vision around the four capacities is widely appreciated, not only in Scotland but also internationally, for its bold, aspirational, value-driven and future-oriented approach, as compared to conventional curriculum thinking in policy making and school practices. As mentioned above, CfE pursues the vision of helping learners aged 3 to 18 years gain the knowledge, skills and attitudes suited to the demands of the 21st century by providing them with a broad competence-based education and helping them develop four capacities: becoming successful learners, confident individuals, responsible citizens and effective contributors.

The vision has and continues to receive broad support for its values and principles across seemingly all stakeholders, experts and practitioners. The OECD team observed this support throughout the review, during the interviews with practitioners, learners and parents of both primary and secondary education (Annex B). This support for the four capacities and the vision they draw for Scottish learners expands beyond school communities, among policy makers, education professionals and other stakeholders (OECD, 2020[11]). Also, in the political arena, there is hardly any disagreement about the overall vision. The consensual approach to educational decision making in Scotland has helped create this wide support. Although over the years, some cracks in the appreciation for CfE seem to have emerged, the wide support for the vision is still present, as evidenced in many reports and all assessment conversations.

The CfE vision is also recognised as trendsetting in international curriculum discourses. It has served as a widely cited example due to its principles and compact visualisation of the four capacities and the attributes and capabilities that specify them (Figure 2.2). Competencies such as critical thinking and problem solving, central in Scotland's Curriculum for Excellence, are two of the most targeted competencies among OECD countries and jurisdictions pursuing 21st century curricula (OECD, 2020[12]).

Figure 2.2. Attributes and capabilities of the four capacities in Scotland's Curriculum for Excellence



Source: Updated description of CfE attributes and capabilities visual, courtesy of the Scottish Government.

In the years following the development of Scotland's vision for its Curriculum for Excellence, OECD countries and jurisdictions such as Australia, Canada (Ontario and British Columbia), Estonia, Finland, Japan, New Zealand and the United Kingdom (Wales) also re-designed their curricula to align them with what students need to learn to fulfil their personal, academic and future professional lives in the 21st century. The basic ideas of CfE are still valid (after almost two decades following inception) and still adequately reflect the four broad aims that are nowadays internationally seen as relevant for learning and teaching in education.

The preliminary findings of the OECD's Future of Education and Skills 2030 project further support these future-oriented visions of aiming for the holistic development and engagement of learners. The OECD's Learning Compass 2030 also proposes a common framework to conceptualise the knowledge, skills, attitudes and values that learners need to fulfil their potential and contribute to the well-being of their communities and more globally (OECD, 2019[13]). Scotland's approach with CfE has been a continuous reference point in curriculum frameworks and visions internationally (OECD, 2020[12]). Next to more traditional (academic) knowledge aims, there is more attention placed on competencies that prepare a student for life, for personal development, and for the world of work (with appreciated options for vocational directions and apprenticeships).

CfE seems to have entered the hearts and minds of many people in many roles across the education spectrum. That is in itself an accomplishment, as beliefs are usually the most difficult to influence in curriculum change (Cuban, 1992[14]; Fullan, 2008[6]), particularly when compared with two other important dimensions of change among teachers: use of materials and instructional behaviour. However, there are still traces of some traditional beliefs (e.g. the preference for very broad programmes in terms of many separate subjects) that hinder implementation in terms of programmatic and organisational changes. Moreover, agreeing with the vision of CfE does not automatically imply that behavioural changes, notably in pedagogy, assessment and student practices, are in line with the intentions (see the next section).

Considerable efforts were made to respond to teachers' needs for clarification by developing "Experiences and Outcomes" documents that further describe the expectations for learning and progression in all areas of the curriculum. Taken as a whole, the experiences and outcomes aim to embody the attributes and capabilities of the four capacities (Education Scotland, 2018[15]). Concerns were raised, however, about the relevance, practicality and effectiveness of the tools aiming to operationalise CfE's vision, such as the attributes and capabilities, and the Experiences and Outcomes (referred to "Es and Os" by practitioners). According to practitioners interviewed by the OECD team, the Es and Os were somewhat useful in defining broad steps in learners' progression but not connected enough to learning tasks and outcomes to be useful in curriculum planning.

The OECD team also observed a degree of disconnect between the concepts of knowledge, skills and attitudes or capabilities and attributes present in the four capacities and how they are integrated into CfE learning. In particular, although knowledge elements are mentioned in the listing of curriculum areas (science; languages; mathematics; social studies; expressive arts; health and well-being; religious and moral education; and technologies), they are not explicitly referred to in the four capacities, nor in their elaboration (capabilities and attributes). CfE's vision grants all these elements a complementary role in learning, but there is no clear model of how knowledge, skills and attitudes, capabilities and attributes contribute to learning. In the absence of clarification on what is expected in terms of knowledge as part of the learning process, the role of knowledge appears somewhat fragmented and left to interpretation at the school level, although it is an essential component of learning in CfE's framework. In the overview of attributes and capabilities (Figure 2.2), knowledge is only referred to indirectly in the successful learner capacity's attributes (as literacy and numeracy skills) and in the responsible citizen capacity, but without further detail in the experiences and outcomes about what "knowledge" is referring to.

While it may be implicit in the eight curriculum areas, the current articulation of knowledge, as referred to in numeracy and literacy, seems to create ambiguity on the role of knowledge and its balance throughout

CfE from ages 3 to 18. Following discussions with stakeholders, the OECD team observed a notable pattern: the Senior Phase seems focused primarily on disciplinary knowledge, while BGE seems to have a more balanced approach in terms of weaving in the four capacities. Students interviewed spoke about the challenges they faced in making the transition from BGE into Senior Phase when they had not consolidated the basic knowledge required for the deeper learning underpinning the Senior Phase. The lack of clarity around knowledge may be understood due to an overly cautious reaction to previously overloaded, content-dominated programmes. It may be that the place given to knowledge in CfE is too implicit and that the overall representation of capacities creates the misleading impression that a strong knowledge base is no longer a priority.

The conceptualisation of knowledge is difficult, particularly for education systems attempting to move away from traditional, content-dominated curricula. Knowledge does not necessarily need to be equated with specified subject content and can be discipline-based (in smaller or broader learning areas), as well as interdisciplinary-oriented (around themes or in projects). Moreover, knowledge has multiple aspects, both conceptual and declarative, as well as procedural and epistemic. For instance, the OECD Learning Framework 2030, a product of the OECD Future of Education and Skills 2030 project, distinguishes four different types of knowledge, which can help better nuance its position in a curriculum (OECD, 2019[16]):

- **Disciplinary knowledge** includes subject-specific concepts and detailed content, such as that learnt in the study of mathematics and language, for example.
- **Interdisciplinary knowledge** involves relating the concepts and content of one discipline or subject to the concepts and content of other disciplines or subjects.
- **Epistemic knowledge** is the understanding of how expert practitioners of disciplines work and think. This knowledge helps students find the purpose of learning, understand the application of learning and extend their disciplinary knowledge.
- **Procedural knowledge** is the understanding of how something is done, the series of steps or actions taken to accomplish a goal. Some procedural knowledge is domain-specific, some is transferable across domains.

Boyd's framework of "knowledge and ways of knowing" (2019[17]) similarly highlights the importance of both disciplinary and interdisciplinary knowledge. This framework also introduces the concept of "ways of knowing", which is closely related to the development of epistemic knowledge and learner abilities, such as self-directed learning and growth mindset.

In general, the progress made in curriculum research since the formulation of CfE's vision in 2000 and broader changes in education and society since then offer opportunities to consider some of the vision's core elements, such as the role of knowledge in 21st century curricula. Other countries pursuing competency-driven curricula, close in ambition to Scotland's Curriculum for Excellence, have developed models to clarify the role and interaction of key elements of learning such as knowledge, thus supporting schools' and teachers' development of their curriculum and teaching strategies. For instance, British Columbia (Canada) re-designed its curriculum framework for school education in the 21st century and developed a curriculum model to help schools and teachers develop their curriculum and teaching practices, including a concept-based approach to learning (Box 2.1).

Box 2.1. Curriculum model in British Columbia (Canada)

British Columbia (Canada) re-designed its curriculum framework for school education in the 21st century, building on a concept-based approach to learning and driven by the development of competencies to foster deeper, more transferable learning. The curriculum approach emphasises the deeper understanding of concepts and the application of processes than on memorising isolated facts and information. The learning standards and big ideas for each area of learning identify what is essential — what students are expected to know, be able to do, and understand at each grade.

The curriculum model *Know-Do-Understand* pulls together the best from modern learning theories and British Columbia teachers' advice. The curriculum model is made up of three elements: content, curricular competencies, and big ideas. "Content (Know)" defines what students are expected to know; "Curricular Competencies (Do)" sets out what students are expected to do; and "Big Ideas (Understand)" indicates what students are expected to understand. Teachers combine the three elements in ways they see fit to personalise learning in their classrooms. The content learning standards — the "know" of the *Know-Do-Understand* model of learning — detail the essential topics and knowledge at each grade level.

Source: Government of British Columbia (Canada), (2016[18]), "Curriculum Redesign", https://curriculum.gov.bc.ca/rethinking-curriculum [accessed on 29 March 2021].

Moreover, in terms of measuring progress to accomplish the vision of CfE, the National Improvement Framework (NIF) introduced metrics to understand progress in two key areas of CfE learning: literacy and numeracy. However, the OECD team reflected on whether the focus on these areas clarified the curriculum policy intentions and successfully communicated the progress made in terms of the richness of CfE learning by students or whether it narrowed its priorities. While the NIF emphasises progress on literacy and numeracy, students learning under CfE would benefit from additional evidence on deeper knowledge, health and well-being, and other domains prioritised by CfE.

There appears to be a rich amount of quantitative data collected on Scottish education, but only limited systematic information about what occurs in classrooms implementing CfE. There is a grey area between the intended vision and the attained curriculum. There is selected evidence, and the evidence pack provided by the Scottish Government to the OECD team included a vivid set of case studies of schools that have implemented CfE (Scottish Government, 2021[19]). The OECD team also collected anecdotal evidence from parents who considered that their children had developed a range of knowledge and skills that embody CfE, such as analytical skills, international and social awareness or strong teamwork, for example. However, the team considers that there is a lack of consolidated evidence of CfE practices in schools, hampering a more precise and evidence-informed diagnosis of the curriculum in action and its outcomes.

Following the development of a range of concepts to develop CfE since its inception, there were concerns about the increasing complexity of the underpinning documentation for practitioners to realise the CfE vision. Following a recommendation made in the OECD (2015[20]) report, a group initiated by the Curriculum and Assessment Board, and composed of practitioners, researchers and system leaders collaborated to develop a "refreshed narrative" for Curriculum for Excellence, aiming to consolidate the different documents describing CfE, clarify its core elements and support the process of curriculum design at the school level. It was developed for two broad purposes: to provide a single point of entry to guide practitioners amidst a range of curriculum advice; and to facilitate engagement with the core principles and big ideas of CfE and development of practices to enact these big ideas (Scottish Government, 2019[10]).

This OECD assessment has not observed any particular impact of the refreshed narrative, perhaps due to the short amount of time between its introduction and this assessment. However, several elements suggest that the refreshed narrative may not necessarily fulfil its mission. First, practitioners and policy makers interviewed by the OECD team suggested the refreshed narrative may not have addressed ambiguities of some key concepts of CfE, such as the role of knowledge in learning within the CfE vision and how the four capacities, including their attributes and capabilities, relate to learning practices and observable outcomes. It was also suggested that practitioners might not necessarily focus on the refreshed narrative amidst the vast amount of existing CfE-related documents and their previous ten years of practice.

While there have been efforts to clarify the vision set within Curriculum for Excellence, the OECD team noted some misalignment and lack of clarity between its aims and objectives and actual provision and transitions from ages 3 to 18. Overall, in BGE, especially in primary schools and for students who study to prepare Advanced Highers, selected evidence and stakeholder interviews suggest that the learning aims and objectives align with the vision defined by CfE and the four capacities.

There is a gap, however, in terms of the overall curriculum goals and the qualifications students prepare for during the Senior Phase. Under CfE, the Senior Phase aims to provide opportunities to achieve deeper learning and study for qualifications, awards and other planned activities to develop the four capacities. In practice, the alignment between the learning aims and objectives and the four capacities in the Senior Phase is limited by the type of assessments and subsequent learning practices imposed by restrictive coursework to prepare for national qualifications. While these qualifications can be considered as statements about the specific goals of learning, their emphasis seems to deviate from CfE's broader curriculum philosophy and aims. This narrow focus also appears to have backwash effects on teaching practices and learning experiences in the last years of BGE (OECD, 2020[11]). The emphasis on preparing for exams in secondary education also seems to widen the gap between the vision set in CfE and the practice, as the exams and qualifications may show a limited representation of the broad capacities. For instance, the OECD team heard repeated calls from both learners and parents for a stronger emphasis on preparation for life and work than thus far realised in many current school practices.

On the other hand, CfE's ideals of excellence and equity are well regarded and supported in Scotland. The system's ambitions are embodied in the broad learning aims set for all students during their schooling and in the policy goal of closing the achievement gap between students from different backgrounds. Targeted policies are developed to respond to this ambition. International evidence, including from Scotland's past performance, shows that high-performing education systems can sustain both excellence in student learning and high levels of equity, meaning that excellent learning achievements are not determined by socio-economic background (OECD, 2019[21]). Some stakeholders interviewed by the OECD team expressed a continued tension between the ideals of excellence and equity in CfE, however. Overall, although they support this aspirational goal, stakeholders highlighted that the education system by itself could contribute but not fully achieve it (OECD, 2020[11]; 2015[20]).

Overall, the OECD team considers it wise to maintain the core message of the CfE vision, given its collective development and widespread support. However, while the ideas on paper and in policy are clear, the OECD team's visits, research and analysis conducted on CfE suggest a gap between the intentions set out in CfE, and stakeholders' diverse interpretations and different practices of CfE across Scotland. While this is partly the intention of CfE in terms of autonomy concerning its implementation, it might be worth taking a fresh, critical and creative look at the vision again in light of almost two decades of many societal, scientific, health, political and technological changes that have taken place at both national and global scales. Reviewing what those relatively abstract statements mean and imply for choices in the curriculum for student learning could be a valid exercise to define the next steps.

From the perspective of students, the vision seems globally integrated with Broad General Education for students up to 15 years of age, but less so in the Senior Phase. At this level of education, stakeholders and researchers highlight a gap in practice in terms of CfE aspirations and actual focus on student learning.

This may be because the implementation of that last stage of the 3 to 18 trajectory started later than for BGE, from 2014 onwards, and has had less time to integrate. However, it may also show different tensions, including mismatches between indicators to measure CfE outcomes; between external assessments and CfE expectations; and between progression across the four capacities. Clarifying the metrics of what CfE accomplishes and closing this gap between the vision and practice in the Senior Phase will be at the heart of success in the future development of CfE.

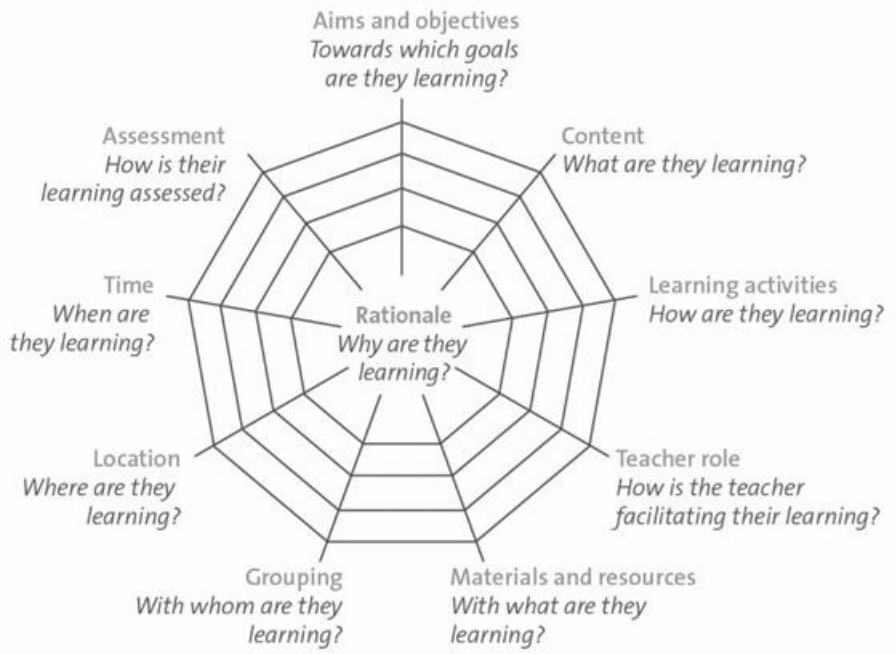
Coherence of the Curriculum for Excellence components

Curriculum for Excellence was developed following a national debate in Scotland in the early 2000s. The first statement of intent was published in 2004, followed by a *Building the Curriculum* series until 2010. These documents, developed in collaboration with national and local partners, set out the broad parameters of CfE, with schools and local authorities encouraged to innovate and find local approaches to planning and delivering the curriculum. *Building the Curriculum 3: A Framework for Learning and Teaching* (2008[22]) is a key document in the series. It sets out the curriculum levels, the eight curriculum areas and principles for curriculum design. "Experiences and Outcomes" followed, setting out concise statements about children's learning and progression in each curriculum area set across five curriculum levels. Benchmarks were developed over 2016/17, complementing the experiences and outcomes and trying to clarify what learners need to know and be able to do to progress through the levels. They also provide support for consistency in teachers' and other practitioners' professional judgements when it comes to assessing the achievement of a level.

Traditionally, a curriculum is primarily associated with the aims, content and organisation of learning (Walker, 1990[23]), but various authors (Klein, 1991[24]; van den Akker, 2003[4]) have expanded this list of components to present a more comprehensive image of a curriculum, including: vision or rationale, goals and objectives, contents, materials and resources, learning activities, teaching strategies, assessment, grouping, time and location. When trying to re-design a curriculum and making it work in practice, it is important to pay attention to the coherence of those components. The (normative) vision on the overarching, broader aims of learning and teaching (analysed in the previous section) serves as a central link, providing glue and connecting all other curriculum components. A metaphor to illustrate this viewpoint is a spider web (Figure 2.3), which includes guiding questions for the many curriculum components (Thijs and van den Akker, 2009[8]; van den Akker, 2003[4]). The curricular spider web points to both the flexibility and the vulnerability of a curriculum, as every chain is as strong as its weakest element, while all components are inter-related and inter-connected.

Besides a visual representation of the challenging components, the curricular spider web can serve as an analytical tool to explore and clarify the discrepancies between the existing and desired curriculum, as well as a design tool that assists developers (including teachers) in prioritising the next steps in the process of getting to a coherent curriculum. Impressions about various components of CfE, according to the spider web, are presented in the following sub-sections, with special attention drawn to perceived gaps between the implementation of the intended curriculum in school and actual classroom practices.

Figure 2.3. The curricular spider web



Source: Thijs, A. and J. van den Akker (2009[8]), *Curriculum in Development*; van den Akker, J. (2003[4]), "Curriculum perspectives: An introduction".

Contents and student learning

Learning in CfE aims to be holistic and centred on the learner, as emphasised by the four capacities. Students are expected to develop knowledge, skills and attitudes. The CfE framework encompasses four contexts for learning: curriculum areas and subjects, interdisciplinary learning, ethos and life of the school, and opportunities for personal achievements. To embed these, and as mentioned above, learning is structured around three interdisciplinary areas (literacy, numeracy and health and well-being) and eight curriculum areas: Expressive Arts; Languages; Religious and Moral Education; Social Studies; Mathematics; Sciences; Technologies; Health and Well-being. Some of these curriculum areas are priorities of the Scottish Government and receive dedicated funding.

For instance, literacy and numeracy are two priorities set out in CfE and the National Improvement Framework. The approach to support literacy is built on a Literacy Action Plan, which informs a range of government-funded programmes. To tackle the priorities for numeracy and mathematics education, Scottish authorities follow and implement recommendations from the *Making Maths Count* report (2016) (Scottish Government, 2021[19]).

The *STEM Education and Training Strategy for Scotland*, published in 2017, is a targeted five-year programme of actions that aims to encourage the development of science, technology, engineering and mathematics (STEM) capabilities and skills to improve opportunities for all, meet employer skills requirements, drive inclusive economic growth and allow Scotland to flourish and compete on a global platform. It includes actions in early years and school education, community learning, colleges, universities, apprenticeships and science centres and festivals. In schools, this includes supporting professional learning to increase teacher confidence in delivering STEM, implementation of the Young STEM Leaders programme, development of a STEM Nation Award to recognise excellence in schools delivering STEM, the collation of an online directory of inspirational resources for schools, and expansion of the Improving

Gender Balance Programme to tackle unconscious bias and gender stereotyping. Progress on this activity is reported annually, including data on key performance indicators (Scottish Government, 2021[19]).

Another priority for Scotland is the health and well-being of children, young people, and other members of educational communities. The aspiration is to help children and young people develop the knowledge, skills and capabilities to build emotional and physical well-being and resilience. CfE has a central role in promoting it, with a dedicated curriculum area and set of Experiences and Outcomes. Its approach is based on a shared responsibility across education levels to make children and young people feel nurtured, safe, respected and included in the learning environment.

The area of social studies aims to help learners understand their own country, the history and heritage of Scotland and the challenges it faces. Specific actions to support social studies involves granting funds to external "delivery partners" who work with schools to provide activities in this learning area, bring external speakers to talk to learners, and organise school trips. Support is also provided to specific themes such as Holocaust education, heritage education and social enterprise in schools.

Language education includes specific actions to preserve the Gaelic and Scots languages, support British Sign Language and develop further learning of all languages from Primary 1 onwards. The 1+2 languages policy aims to enable all learners to study three languages by their third year of education, which has required additional support and funding to guarantee a diverse offer at the school level since 2013 (Scottish Government, 2021[19]).

In general, the OECD team observed and learnt from its interviews with school-level actors that the diversity and holistic approach to learning is consistently adopted in primary schools. The approaches to student learning referenced above appear activity-based and show flexible variation (in line with CfE intentions) in primary, and to some extent, lower-secondary education. The school case studies provided in the evidence pack (Scottish Government, 2021[19]) are testament to the richness of practices for student learning aligned to CfE, in addition to some of the evidence presented by students during discussions with the OECD team and data on improvements in outcomes provided in the NIF annual reports.

The holistic approach also seems to be followed in most secondary schools in the first two years (S1 and S2), although it was often described as challenging by teachers, school leaders and learners. One of the most salient reasons highlighted was the seeming misalignment between the content and learning framework of CfE and the requirements prescribed in national courses for qualifications taken in secondary education. Learning in the Senior Phase was described as being aligned to National Course prescriptions, to best prepare students for important exams required to complete education and move onto the next stages. Such learning does not follow the same structure and principles as CfE (see Chapter 4). As a result, the learning approaches designed in CfE are not fully realised in secondary schools.

Student learning patterns show more traditional learning activities at the upper-secondary level (Senior Phase), with its strong focus on exam accreditation. Senior Phase students reported an emphasis on rote learning and memorisation, which they described as "boring", and on preparing to succeed in the tasks required for qualifications (OECD, 2020[11]). They have fewer opportunities to experience more engaging, intrinsically motivating activities related to problem solving, creativity, co-operation or communication. Interestingly, students reported that they experienced more meaningful approaches to learning in the Advanced Higher courses, which seem to better reflect the CfE vision. Although less explicit, teachers and school leaders also expressed their concerns about the limited instructional patterns in the Senior Phase in relation to CfE. They referred to the need for traditional practices to remain in place as the most efficient way to help students obtain their qualifications.

In some instances, CfE's aspiration to place the student at the centre of learning appears at odds with competing agendas of standardisation (also induced by policy messages and measures) and preparing students for the workforce (Britton, Schweisfurth and Slade, 2018[25]), especially in the later years. Existing accountability mechanisms focus on narrower outcomes than suggested in CfE's vision, which creates

incentives for Senior Phase students and secondary schools to hold on to traditional learning, teaching and assessment practices that do not align with the practices and pedagogy relevant to CfE (Hayward, 2018[26]).

All stakeholders interviewed by the OECD team concurred with the observation that the first three years of secondary education (S1-S3) are increasingly influenced by the need to prepare students for the Senior Phase and its national course exams, with less emphasis placed on designing a curriculum to meet their needs as envisaged by CfE. This appears to be a consequence of both unresolved design issues within CfE and student assessment policies, among other factors. School practitioners observed that the purpose and focus of S2 in particular – a legacy of the 5 to 14 structure that predated CfE – continues to shape its delivery and learners' experience. Preliminary findings from research conducted with school leaders in Scotland found that a considerable proportion of schools asked students to start choosing subjects in S2 (51% of schools, as reported by the school leaders surveyed) and sometimes as early as S1 (14%) (Shapira et al., 2021[27]). Research conducted in Ireland found that the second year of the secondary phase has particular importance for the future engagement and retention of students in the school system; students in the longitudinal study who were not engaged by their second year experience did not re-engage in later years (Smyth et al., 2006[28]).

The lack of alignment of these secondary education years to the CfE vision has historical and structural roots. The structure of the later years of secondary education did not evolve alongside CfE. Given the historically valued preference for a broad curriculum offering in Scottish education and its objective as part of CfE, there are debates around the number of curriculum areas to be chosen by students. As CfE aims to provide both breadth and depth of learning, without agreement on what constitutes an education that is both broad and deep, schools lack clarity on the number of subjects their students should study and the appropriate structure to support their progression. The high number of classes taken in BGE – up to 15 and 17 according to school testimonies (OECD, 2020[11]) – might result in fragmentation and superficiality (with few hours available for each subject per week). Among official submissions echoing stakeholders' concerns to the Scottish Parliament, Universities Scotland specified that learners usually choose around seven or eight subjects for National 4 and five in S2, then a narrower set of subjects for S5/S6, and warned against the risk of further narrowing and "pigeon-holing" students at too early an age (Scottish Parliament - Education and Skills Committee, 2019[9]). The number of subjects in the Senior Phase is seen by some as too low, as they are narrowing a broad education, limiting choice to students and offering insufficient preparation and depth into disciplinary knowledge due to the focus on qualification preparation (OECD, 2020[11]). Others believe that the importance of broad choice is perhaps over-emphasised, as it may create tensions with the desired deeper understanding of knowledge.

The OECD team noted schools' commitment to conceive curriculum models that offer a wide variety of learning experiences, subjects and qualifications (see Box 2.2 for an example). The issue of subject choice was initially considered as an example of local curriculum flexibility. Different pathways have developed, especially with a wide array of vocational choices also delivered by colleges. The variation of subject choice between schools may have unforeseen consequences for learner progression, however, given the historical importance of subject choice in Scotland. There seems to be an issue about the real choice options students have, given the variation between schools, depending on the context, capacity and resources (Shapira and Priestley, 2018[29]), which touches on equity concerns. Of note in discussions between the OECD team and stakeholders were some observations about the constraints placed on schools by some local authorities in curriculum organisation.

Box 2.2. Curriculum for Excellence, as applied at the Portlethen Academy (secondary school, Aberdeenshire)

Vision: To be the very best we can be.

Values: Learn and improve. Get involved. Think of the consequences. Respect all.

Rationale: Attainment for all and Developing the Young Workforce (DYW) have been central planks of our thinking and we have worked to establish a flexible and broad curriculum that is responsive to pupils' needs, interests and aspirations. The offer aims to provide pathways that have strong links to the workplace and to Skills for Life, Learning and Work for all young people. We aim to be flexible and provide experiences that allow young people to focus on interests but are not so narrow as to be limiting. The offer also provides experiences and certification for young people who do not fit the "traditional" profile of the N5s and Highers offer.

Design traits: The curriculum is based on the four capacities of Curriculum for Excellence. A skills framework is built into curricular content. A personalisation process is offered to pupils as they move from S2 into S3. All of the Senior Phase years (S4-S6) are timetabled together. The Senior Phase has a wide curricular offer: young people can choose and achieve qualifications in subjects that allow for progression into employment, further education and higher education. There is a strong focus on Developing the Young Workforce throughout all stages of the curricular offer, including numerous qualifications and courses (Foundation Apprenticeships, National Progression Award [NPA] Enterprise and Employability). Links with North East Scotland College (NESCol) widen the Senior Phase curricular offer. The school is involved in the Excelerate programme in conjunction with the Wood Foundation with a developing focus on project-based learning. Key partnerships are developed to enhance learning, e.g. with community learning and development (CLD) (Gear Up To Go), the Mackie Academy and Mearns Academy (Moving Forward), and the Aberdeen Football Club Community Trust.

Concretely, the curriculum for the last three years of Broad General Education (lower-secondary) implies:

- Pupils follow a curriculum in S1 and S2 designed to give experiences in all subjects they can select from in S3/Senior Phase.
- A personalisation process as pupils progress from S2 into S3.
- A high level of support offered when personalising the curriculum at the end of S2.
- Moving Forward curricular input is offered in conjunction with two neighbouring schools for targeted pupils in S3.
- The curricular offer is developed with the Aberdeen Football Club Community Trust to offer a tailored pathway linked to health and well-being and sport, which leads into an offer in the Senior Phase.
- S3 pupils complete awards during core subjects (e.g. the Religious Beliefs and Values Award in Religious, Moral and Philosophical Studies [RMPS], the Employability Award in Personal Social Education [PSE]).

In the same school, the Senior Phase curriculum implies:

- S4: Six subjects, including English and Mathematics. Maths and Applications of Mathematics are both offered and completed by pupils in S4 to enhance attainment. S4 students complete awards during core subjects.
- S5: Five subjects plus an enrichment option (allows for additional subjects/qualifications).
- S6: Four or five subjects, plus an enrichment option.

- Pupils choosing a National 4 or National 5 course also complete a Personal Finance qualification.
- S5 pupils complete a Personal Development award at Scottish Credit and Qualifications Framework (SCQF) Level 6 from session 2020/21.
- S6 pupils complete a Leadership Award at SCQF Level 6 from session 2020/21.
- A wide offer of qualifications (National Qualification [NQ], NPA, SQA Awards, Foundation Apprenticeships).
- Foundation Apprenticeships are offered in Accountancy, Children and Young People and Health and Social Care and a pilot Foundation Apprenticeship in Creative and Digital Media (2019/20), and in four additional frameworks (Business Skills, Engineering, Information Technology [IT] Software, Scientific Technologies) in 2020/21.
- Additional pilots explored (SCQF Levels 4 and 5) with the support of the local authority and the Aberdeen Football Club Community Trust.

Source: Scottish Government (2021[19]), *Curriculum for Excellence 2020-2021 - OECD review: initial evidence pack*, https://www.gov.scot/publications/oecd-independent-review-curriculum-excellence-2020-2021-initial-evidence-pack/ [accessed on 24 March 2021].

More reflection seems advisable on the actual degree and nature of student choice. In discussions with education stakeholders, the focus on academic preparation in traditional subjects was predominant. The strong focus on the number of subjects in comparison to the modest attention to the actual quality (relevance, consistency, practicality, effectiveness) of teaching and learning fit for the 21st century at this level appears to be an issue. This is also illustrated in parliamentary debates on Curriculum for Excellence, where stakeholders expressed the view that learners in all schools should follow a similar number of courses each year; and that greater prescription should be provided on a core set of subjects in the curriculum (Scottish Parliament - Education and Skills Committee, 2019[9]).

Prescribing the same number of courses for all students, regardless of their preferences for post-secondary routes and destinations, may not be optimal, however. Doing so does not seem aligned with some of the policy intentions mentioned above or with quality. In the Education Scotland (2020[30]) report about curriculum in secondary education, Her Majesty's (HM) Inspectors of Education noted that the focus of professional debate needs to be less about the number of subjects or courses and more about how to deliver the Senior Phase entitlement in creative ways. Teachers and school leaders also noted that Senior Phase curricula need to meet the range of young people's needs and develop their skills, attributes and capabilities as well as opportunities to attain qualifications that support positive destinations, taking into account the school's unique context. Inspectors also noted that the extent to which the curriculum offered leads to positive outcomes for young people depends on several factors; it is not just about the number of subjects offered in any one year in the Senior Phase. Some of these factors include the quality of change leadership; students' own perception and day-to-day experience of the curriculum; the curriculum enacted in the quality of learning and teaching; the effectiveness of BGE in supporting progression to the Senior Phase; and the range and quality of learning pathways provided that best meets the needs of learners within the school (Education Scotland, 2020[30]).

This focus on subject choice, however, and the failure to address the problems associated with it has also had implications for how the CfE commitment to a broad curriculum translates at the school level. Breadth is one of the design principles of CfE and was defined in guidance for practitioners on assessing student achievement as "the number and range of experiences and outcomes encountered by learners" (Education Scotland, 2012[31]). In a discussion of interdisciplinary learning in *Building the Curriculum 3* (Scottish Government, 2008[22]), this was defined as "space for learning beyond subject boundaries", where learning

can be organised based on groupings of experiences and outcomes from within and across curriculum areas.

Interviewing system leaders, teachers, students and their parents, the OECD team was struck by how differently they understood breadth in CfE. For most stakeholders, breadth was defined by offering as many subjects as can practically be made available in secondary schools to give students as much choice as possible in moving to the Senior Phase. This is not an unreasonable position of schools given the backwash of qualifications and the professional profile of teachers as subject specialists. An enquiry by the Scottish Parliament in 2019 into subject choices noted the tensions between the aspiration for a wide choice and what was termed by one witness as "the six-column environment" (where students choose their options from across six columns) (Scottish Parliament - Education and Skills Committee, 2019[9]). There was no discussion of the meaning of breadth beyond access to subjects. Yet, originally, breadth was envisaged as providing students with opportunities to connect within and across disciplines and with real-life contexts and problems. What CfE proposed was not the end of subjects but a curriculum that made explicit efforts to afford students with those opportunities. In discussions with stakeholders from primary schools, interdisciplinary studies were mentioned but as a marginal activity in curriculum making and student learning. Discussions with those in secondary schools did not raise the issue of interdisciplinary studies.

Another important issue related to the content in the Senior Phase is the balance between knowledge and skills. This issue links back to the analysis of CfE's vision and its lack of clarity on the role of knowledge in learning and the CfE framework. Some suggest that the disciplinary knowledge offered is too limited to adequately prepare students for academic studies. In contrast, others found this less problematic and argue that depth of acquisition and broader competencies are more important for future learning and studies.

The OECD team suggests developing a more nuanced view of the role of knowledge in relation to aspired skills or competencies (defined as the interaction between knowledge, skills and attitudes). It is internationally common to gradually move from many subjects (partly grouped into broad learning areas) to a smaller amount of more discipline-based subjects in the academically oriented streams in upper-secondary education (O'Donnell, 2018[32]). Such subject-oriented courses offer more chances to acquire deeper learning and understanding, which is also beneficial for generic learning ability. However, one would hope that within those subjects, deliberate attempts are made to clarify and demonstrate how such subject-focused learning can contribute to broader aims and themes, including attention to the four capacities.

Overall, the OECD team found that, in contrast to how BGE has adopted CfE across the board, the substantive design of the qualification-based courses in the Senior Phase is not consistently in line with the CfE philosophy and does not offer a clear transition for students from BGE into the Senior Phase. Various comments and observations suggest that the previous curriculum emphasis on subjects (including standards) and its organisation in previous structures still dominate and have not adequately been revised and adapted. Policies about subjects and breadth in the secondary phase did not develop as needed to support the original vision of CfE during the implementation period. These legacy gaps give rise to the risk of the "mile-wide-inch-deep" curriculum happening in S1-S3, as identified by the OECD in several education systems in a study on curriculum overload (OECD, 2020[11]). They are now impeding the further development of CfE and curtailing its aspirations for learners in secondary schools.

The role of teachers

Teachers in Scotland are regarded as well educated and respected professionals. The many teachers the OECD team had conversations with confirmed this reputation. Overall, the team recognises a strong commitment to varied teaching approaches for student learning and curriculum design. During general education, teachers appear to be quite successful in that respect. Many testimonies were heard of their

efforts to develop CfE for their students, of their engagement in learning and in moderation to ensure they were assessing their students well, particularly in primary and lower-secondary education. The case studies in the evidence pack also present concrete teaching practices and approaches (Scottish Government, 2021[19]).

Less clarity seems to exist about pedagogical approaches that are well aligned to CfE in (particularly senior) secondary education. Both teachers and school leaders reported ambiguities and difficulties in realising CfE principles and instructional ideals at this level. The move from general teachers to specialised subject teachers in secondary education may imply more specialisation and less integration of learning to meet the principles of CfE. As mentioned in the previous section, such varied and challenging approaches are hard to enact in a context where passing externally set assessments, including national exams (that reflect quite different emphases) is an obvious priority in the immediate interest of students (and their parents).

In terms of commitment to curriculum renewal, the complex context for educational reform - with many competing priorities and tasks and with tensions between autonomy and regulation - seems to diminish the focus on "quality teaching for quality learning" (Chapman, 2019[33]). This policy context also reduces opportunities for "teacher agency", according to selected academics (Priestley, Biesta and Robinson, 2015[34]), where teachers (not only individually but also in teams) have more substantial influence in shaping their day-to-day curriculum work. Obviously, translating curriculum policy documents into classroom realities is a complex and demanding task; it needs space, time and support for teacher professional development (Wallace and Priestley, 2016[35]). While many efforts for this professional development have been initiated, and many teachers have been developing curricula and sharing practices across schools and networks, it is clear that sustained investments are needed.

Materials and resources

CfE has produced large amounts of guidance materials for teachers to support them in developing their own curricula in schools and classrooms. Given the allocated curriculum autonomy and demands by teachers for guidance, these are important efforts by the Scottish government to support the development of CfE in schools. As the curriculum was being implemented, a range of guidance and support materials was generated at both the national and local level. This led, over time, to a perception of overload by practitioners, as reported to the OECD team.

Action was taken at the national level to significantly streamline all support and guidance materials for the curriculum. In 2016, a definitive "Statement for Practitioners" from HM Chief Inspector of Education was published (Education Scotland, 2016[36]). The statement acknowledged that there was too much support material and guidance for practitioners at both the national and local levels, which was contributing to the growth of over-bureaucratic approaches to planning and assessment in many schools and classrooms across the country. The statement was intended to provide clear, practical advice for teachers and practitioners on the planning of learning, teaching and assessment across the curriculum. It summarised the key components of the curriculum framework within which teachers and practitioners were expected to teach.

The OECD team recognises that important efforts, resources and engagement have been invested to develop CfE after its initial design. This continued policy attention is impressive. However, an unintended consequence is that the many curriculum-related documents, tools and instruments have become rather complex. The evolving CfE seems overloaded with numerous elements: the vision around its four capacities (with attributes and capabilities); seven principles; eight curriculum areas; curriculum entitlements; qualifications; expectations and outcomes; benchmarks; moderations; progression levels; and more. Although the efforts aimed to bring more clarity, often in response to practitioners' concerns and questions, taken together, this somewhat overwhelming image has elicited some criticism, e.g. a "cluttered", "over-accessorised" curriculum, which includes specific, somewhat unnecessary, jargon.

The complexity inherent to CfE makes it not only challenging for foreign outsiders (such as the OECD team) to grasp in its totality, but it also reduces the clarity and consistency for practitioners, hampering actionable curriculum design on the ground. Moreover, while CfE policy intends to stimulate flexibility for local curriculum design, it can place this flexibility at risk, as the multitude of measures and documents suggests an output regulation with high prescription. The amount of ongoing policy and support documents seems somewhat in contrast with the espoused autonomy and flexibility for school leaders and teachers to be the major agents for change themselves. This contrast is reflected in the frequent policy vocabulary about "delivery", which might suggest that practitioners have an obligation to hand over the curriculum (as a package from above) to their learners. In the literature about education policy implementation, the term and process of "policy delivery" refer to top-down approaches to implementation which leave little agency to school leaders, teachers, learners and other stakeholders (Viennet and Pont, 2017[2]).

The OECD team also heard concerns about the clarity and practicality of the documentation produced around CfE. According to the stakeholders interviewed, teachers need other kinds of materials, or additional support and coaching, to feel comfortable enacting the curriculum. Based on what the OECD team could observe during school visits and analysis of school case studies, most instructional materials seem to be site-specific, developed by teachers themselves, within their own school or in networks with colleagues of schools in their region.

Compared to many other countries, Scottish teachers seem to rely much less on textbooks produced by educational publishers. This may be seen as a sign of strong professional capacity among teachers. However, it also raises some questions about efficiency, as developing high-quality instructional materials requires a lot of expertise, time and energy, while teachers often lack time for this type of work.

Schools and teachers internationally are increasingly given responsibility in curriculum management in countries and jurisdictions where curriculum adaptations or autonomy are granted at the local or school level to ensure that the curriculum meets the needs of students and local communities. However, some education systems report that curriculum overload tends to be heavier at the local level, with teachers and schools overburdened by the responsibilities such autonomy entails. This is often due to one of two extremes: either a lack of guidance on what to remove and what to prioritise in curriculum content or guidelines that are too prescriptive. In some instances, teachers may also have difficulty combining new competencies and subjects with traditional disciplines, contributing to greater overload (OECD, 2020[37]).

The use of (non-prescriptive and adaptable) exemplary or "educative" materials (Ball and Cohen, 1996[38]; Davis and Krajcik, 2005[39]) has been shown to free up time and energy for teachers for (preferably joint) professional capacity building during adaptation of such materials to their specific contexts. It may be an option to make the multitude of many separate curriculum policy tools less overwhelming and more actionable for teachers by translating and integrating them into materials that exemplify those essential parts of the curriculum that are experienced as particularly challenging by teachers. Systematic evaluation and subsequent sharing of high-quality materials (such as exemplars) in networks and digital platforms (for instance, through Glow) may offer welcome opportunities to support efficient (re)design of practices and professional learning in Scotland.

Grouping, location and time

The grouping component was less prominent in conversations between the OECD team and practitioners. Few specific comments or problems about grouping of learners were made, with one exception seldom raised during the interviews: organisational and pedagogical challenges about differentiation within multi-level classes. "Multi-course" teaching in Scotland relates to a situation in which a teacher must attempt to teach coursework for different levels of qualifications in the same class. The OECD team understood that this issue had taken prominence in discussions around teaching and learning in secondary schools. Analysis by the Scottish Secondary Teachers' Association (SSTA) and the Royal Society of Edinburgh was brought to the attention of the OECD team. However, given the limited expression of

concerns among stakeholders and teachers relative to other issues, the OECD team was not in a position to add further evidence-based analysis of this issue. The Scottish Parliament's Education and Skills Committee already recommended that Education Scotland and the SQA undertake work to identify which subjects might be compatible with multi-level teaching (as reported by the Committee Convener to the OECD team).

Similarly, a few specific remarks were made on curriculum location as defined in the spider web. In recent years, investments in school buildings and facilities have been made. Unsurprisingly, the recent COVID-19 crisis has kickstarted improving the IT infrastructure.

The team also noticed some ambiguity around the scheduling of courses in S3 and above. Concerns were reported about the limited time to go into depth for the various subjects, which is reviewed in the depth versus breath section. In addition, the recent COVID-19 circumstances have led to class periods longer than the usual 45 minutes. Learners in particular (as well as teachers) appreciated this change as the longer class periods offer more opportunities for varied and deep learning.

Assessment

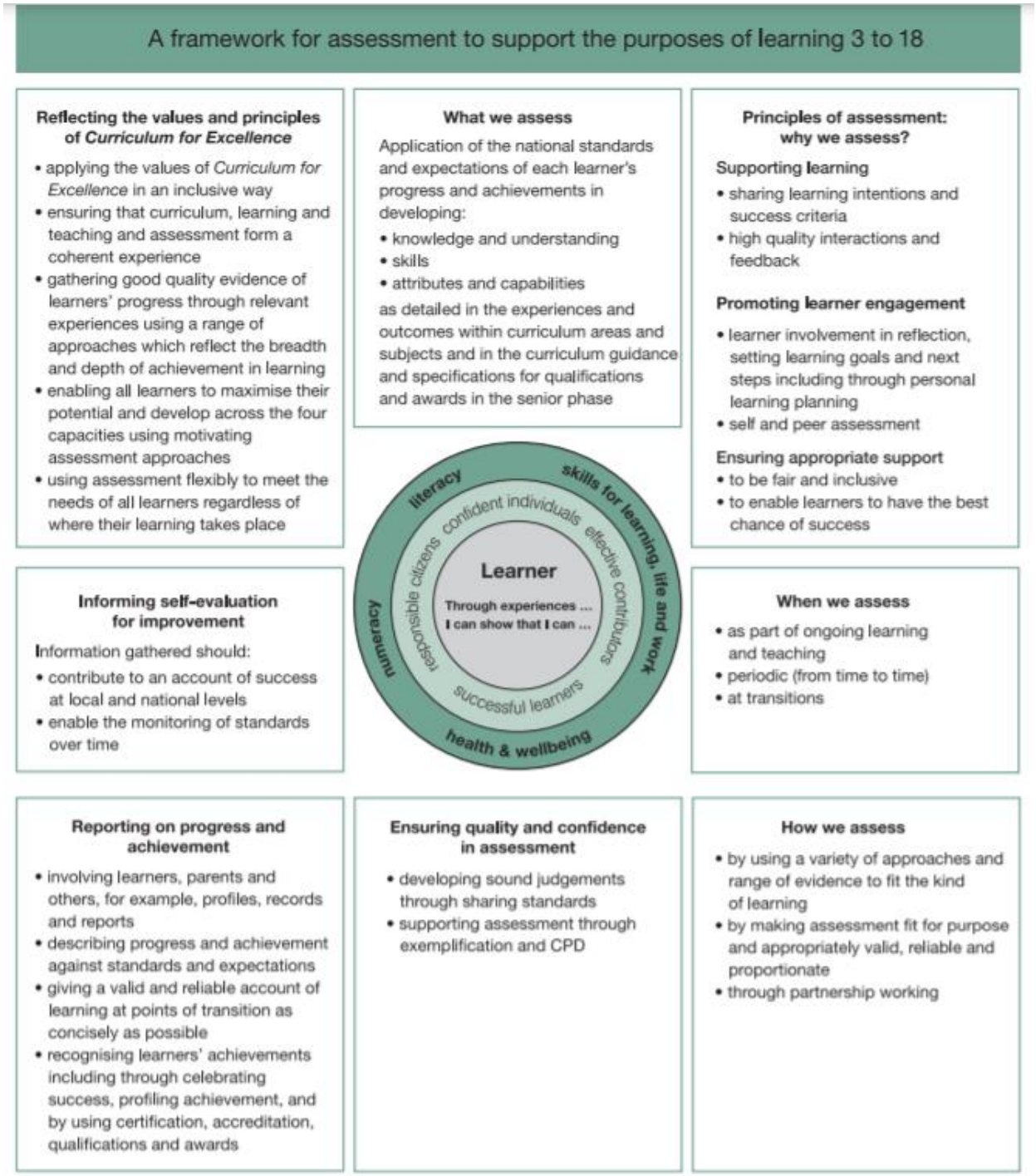
As part of the CfE policy, a comprehensive assessment framework was proposed in *Building the Curriculum 5: A Framework for Assessment*, a key piece of the CfE framework published in 2011 (Figure 2.4). *Building the Curriculum 5* was intended to be the main piece of guidance in relation to assessment advice, both in the BGE and across the entire learner journey from ages 3 to 18 years (Scottish Government, 2011[40]). It was supported by supplementary guidance, covering the following aspects: reporting; understanding and applying shared standards; recognising achievement, profiling and reporting; and quality assurance and moderation.

In 2017, guidance on benchmarks was published to complement CfE, which set out what learners needed to know and be able to do upon achievement of a curriculum level. A wide range of programmes of support for assessment and moderation were developed through collaboration between Education Scotland, local authorities and practitioners. They provided practitioners with opportunities to share, engage and reflect on the assessment and moderation of CfE levels across the BGE (Scottish Government, 2021[19]).

Following the proposed framework, student assessment is promoted as an integral part of learning and teaching and considered an ongoing process used for formative as well as summative purposes. Up to S3, assessment by teachers is supposed to be the main mode of assessing students' achievements. Experiences and Outcomes are a set of statements about students' learning and progression in each curriculum area in BGE, intended to help teachers and learners plan to learn and assess progress. Experiences and Outcomes are designed to provide for progression in learners' knowledge, skills and deep understanding and determine the framework for teaching and learning in CfE. At Senior Phase, students' choices of national qualification courses, work-based learning and other qualifications and awards define different progression frameworks. Learners may choose a blend of national courses and other types of coursework depending on their interests, learning projects and intentions for post-school destinations.

Benchmarks have been developed to clarify the national standards expected within each curriculum area and each interdisciplinary area at each level. Using the Experiences and Outcomes statements, benchmarks set out lines of progression from Early to Fourth Levels to clarify what learners need to know and be able to do to progress through the levels. They help support consistency in practitioners' professional judgements. Schools are expected to report on curriculum-level achievement for literacy and numeracy, and data are collected and collated at the national level for reporting purposes.

Figure 2.4. Proposed Framework for Assessment within Curriculum for Excellence, 2011



Source: Scottish Government (2011[40]), *Building the Curriculum 5: A Framework for Assessment*, https://www.education.gov.scot/Documents/btc5-framework.pdf [accessed on 22 March 2021].

BGE has five levels of progression (early, first, second, third and fourth) that approximately correspond to system levels of pre-school to lower-secondary education. However, CfE's approach to progression allows, in theory, for students to attain levels at their own pace. Achievement of a level is based on teachers' overall professional judgement and informed by a range of evidence against the benchmarks defined for

each curriculum level. The Senior Phase represents the sixth level of progression in CfE (Scottish Government, 2021[19]). As part of the assessment framework, practitioners are expected to engage in moderation, a collaborative mechanism through which teachers develop a shared understanding of standards and expectations. Moderation involves practitioner meetings throughout the year to discuss a range of assessment evidence that demonstrate learners' progress and achievement. It takes place at the school, local, regional and national levels.

Efforts to structure an approach to student assessment aligned with CfE's philosophy seem to have been carried out in primary schools. The OECD team finds causes for concern, however, in secondary schools and especially in the Senior Phase. At that stage, assessment practices appear to create considerable tensions and obstacles for realising the intentions of CfE. Findings from research also present a complex picture, concluding that the large number of assessment benchmarks to specify the Experiences and Outcomes has resulted in over-specified programmes, fragmented instructional tick-box approaches and more bureaucratic than coherent, curriculum planning (Hayward, 2018[26]; Priestley and Minty, 2013[41]).

Assessment is an issue of major concern and stress at the secondary level, for almost everybody, from students and their parents, to teachers, administrators, media, and politicians (both in Parliament and Government). Overall, the OECD team perceived a focus on achievement labels, levels and scores in Scotland, which is common in secondary education in many countries. There does not appear to yet be successful alignment of qualifications and exams in the Senior Phase with the CfE vision, which is not only challenging for the Senior Phase itself but is causing a backwash into the later stages of BGE (Scottish Parliament - Education and Skills Committee, 2019[9]). It is also hampering the full enactment of the CfE ideals in those stages and creating a gap in student learning and progression as students move through the curriculum. From the issues raised throughout the OECD visit and the literature, it seems that the education system spends a disproportionate amount of time and energy on technical issues around student assessments and (high stakes) examinations, while there are doubts about the relevance and validity of their goals and content.

The COVID-19 pandemic has provided a unique opportunity to explore different alternatives to student assessments, which can be considered in the future in relation to this gap. This is not a unique feature of Scottish education but a persistent problem in many OECD countries that many are aiming to tackle. Portugal, for example, passed a law delegating curriculum autonomy and flexibility to schools, intentionally promoting formative assessment, so as to avoid curriculum narrowing and to encourage teachers to explore new types of assessments (OECD, 2018[42]).

Overall implementation of Curriculum for Excellence

Scottish schools at both primary and secondary levels have developed and implemented their curriculum using the CfE framework. The OECD team emphasises that not each of the curriculum components reviewed have to be specified at all levels (nation, school, classroom), on the contrary. In principle, it is advisable that at the system level, the emphasis is on formulating general directions for why and what matters in order to inspire and guide further decision making. Vision formulation, common goal statements and joint assessment approaches can outline the general course of action since it is often difficult enough to arrive at a reasonable and workable consensus in those areas. Further interpretation and elaboration for all components are better left to local and school levels, where specific choices can be made that fit the local characteristics and preferences.

BGE is envisaged to cover the period from S1 to S3 to ensure that young people acquire a breadth of experience across eight curricular areas. The Senior Phase is envisaged as a three-year experience in which young people are encouraged to remain at school for longer and engage in deeper learning with a broader range of opportunities to develop skills that are relevant to the wider world. Several inquiries about the implementation of CfE in secondary schools observed that many schools attempted to implement the

new curriculum model of three years of BGE followed by three years of Senior Phase (referred to as the "3+3" model in Scotland) within the unchanged structure of the previous curriculum model divided into two-year periods ("2+2+2"). This resulted in unintended consequences, including the blurring of S3's purpose. S3 is at times used to start preparing students for the qualifications courses expected of them in the Senior Phase, effectively shortening the time allocated to their broad general education due to the narrowing effect of National Courses on learning in the Senior Phase. Some stakeholders viewed S3 as a "waste of time" and considered it better for this level to start preparing for Senior Phase qualifications (Scottish Parliament - Education and Skills Committee, 2019[9]).

This lack of alignment contrasts with earlier policy rhetoric about the Senior Phase, which expected the CfE values, purposes and principles to underpin all National Courses. Schools are expected to provide learners with opportunities to acquire and develop the four capacities, as well as skills for learning, skills for life and skills for work. CfE is meant to be a pedagogical approach to provide learners with a rich education, to develop the knowledge, values and skills that make them resilient in a fast-paced, global society and economy.

National Courses aim to qualify a learner's achievement against a defined standard, providing learners with the opportunity to demonstrate their acquisition of skills, knowledge and understanding in a formal way. The broad objectives of National Courses are to provide high standards, and breadth and depth of learning that will help learners progress to further study, training and employment. The reality of the Senior Phase seems, however, to deviate from the espoused policy intentions of the new National Courses.

The new National Courses were designed to form a qualifications system that:

- supports the values, purposes and principles of Curriculum for Excellence, and supports the learning of the new curriculum, including its breadth
- provides a seamless transition from Outcomes and Experiences, with increased emphasis on skills
- is inclusive, coherent and easy to understand for pupils, parents, staff, employers and other users
- meets the needs of all learners in progressing from prior levels of achievement and provides opportunities for learners to develop at different rates, at different times, in different areas across the curriculum
- provides clear and smooth progression and articulation between different levels of qualifications, to Higher and Advanced Higher, and onto post-school learning and employment
- involves an overall approach to assessment that reduces the time learners spend on assessment for certification and allows more time for learning, and more focus on skills and integration with other aspects of learning
- results in an assessment that supports, motivates and challenges learners, with more scope for personalisation and choice
- maintains high standards, credibility and relevance.

Practice in the Senior Phase seems to be different than expected. A gap between the intended curriculum (in formal policy) and the implemented curriculum in (school and classroom) practices seems to have its roots in the stage of initial curriculum design, where efforts to translate the visionary ideals into qualifications (and related course documents and assessment tools) have not fully succeeded, compromising many initial ideals. Many policy intentions at the introduction of the new qualifications (McAra, Broadley and McLauchlan, 2013[43]) do not seem to have been fulfilled yet. It was one of the major concerns raised during the national debate on education in 2002 (which led to the CfE initiative) that the secondary curriculum focused too strongly on exams.

The OECD team's general conclusion is that the coherence between the various curriculum components as well as the consistency between the policy intentions at large and the implemented curriculum in local contexts is better for learners aged 3 to 15 years, especially in primary schools, than for learners aged

15 to 18, except for students who are preparing for Advanced Higher qualifications, which seem to continue teaching and learning practices in line with the CfE vision.

BGE curricula in both primary and secondary schools could still benefit from a clearer definition of the role of knowledge in learning and competency development, as it would enhance the transition into the Senior Phase. The Senior Phase, and especially the Higher courses, do not appear to be fully aligned with CfE intentions in aims, content, pedagogy and assessment. Choices should be made in relation to what is best for students to be prepared for their future. At present, as the current student assessments in the Senior Phase are the only way to externally assess what students are learning, these are the incentives that lead the focus of the Senior Phase.

The following questions come to mind:

- How could the structure of the Senior Phase be aligned with CfE?
- How should learning and teaching be organised?
- What does breadth of learning really involve?
  - The number of subjects only?
  - Interdisciplinary learning?
  - Something else?
  - Or something more?
- And how can breadth be articulated with depth of learning?
- How much should be obligatory and how much room is available for personal choice?

The OECD team feels a balanced discussion with active input from stakeholders with different perspectives and interests would be highly useful. It is necessary, first, for the productivity of such a debate to reach more clarity on what the Scottish system means by the key terminology of “knowledge”, “skills”, “attitudes”, “attributes”, “capacities”, “capabilities”, “competences”, “dispositions” and the like. Although it is a matter of deliberations within the Scottish context, support from curriculum design scholars would help align those definitions with the concepts from the literature. Some inspiration about options could be offered by international trends and promising examples [see, for example, O’Donnell (2018[32]), for a comparative study]. The current COVID-19 situation can be a good opportunity to engage in this discussion.

When one compares the intended, implemented and attained curriculum, many good practices emerge. The original policy intention of CfE was to provide a future-oriented curriculum with a clear vision that gives more autonomy, space and flexibility for schools to adapt and enact it. The OECD team has heard testimony of this approach, building on a high-quality teaching workforce, pedagogical leadership and availability of support approaches and materials for schools and their professionals. Although the actual task of curriculum design still appears to be challenging for all schools across Scotland, a variable but gradually growing capacity is observed. It is important to realise that it takes long-term investments and time for such processes to become successful and institutionalised. That lesson can be learnt from, for example, the four decades that it took education in Finland to build up such bottom-up curricular capacity in communities and schools, with lots of patience, stamina and ongoing support (Halinen and Holappa, 2013[44]; Halinen, 2018[45]). However, it is encouraging to see that there appear to be many strong school leaders able to lead their schools to develop and build on the strengths of CfE for their students. The new initiative to lead more “from the middle” (OECD, 2015[20]), resulting in the establishment of six Regional Improvement Collaboratives (RICs), might support such curricular capacity building. Thus far, the experienced support by these RICs seems more limited than hoped for.

While there are good intentions and practices across the system, the implementation of CfE shows a large variety of practices between schools and classrooms. This leads to questions about whether the intended autonomy and flexible practices of schools are threatening the aspirations for equity in students’ experiences and outcomes. Thus far, the attainment gap appears to have decreased somewhat over the

last decade (Scottish Government, 2019[46]). However, there are tensions between the variety of learner experiences made possible by schools' curricular freedom and a wider range of qualifications by the SQA and other actors, on the one hand, and the perceptions of stakeholders and the wider public of what "success" and "excellence" mean, beyond obtaining a set of national qualifications, on the other. Further efforts are needed to ensure that the variety of instructional practices, assessment and qualifications offered are of high quality so that CfE contributes to closing the gap. However, this is not up to schools alone. Wider public, socio-economic investments and support seem indispensable in domains such as housing, health, and jobs.

Beyond CfE implementation, looking at impact, the OECD team noted positive impressions of the attained curriculum (in terms of learner experiences and results), as mentioned by many who were interviewed and confirmed by the team's observations during conversations with students. Learners seem confident, communicative, engaged, analytical, and they are quite keen to make (more) choices themselves. Many interviewees expressed that Scottish students today are much more well rounded in their development and that they exhibit more curious behaviour and a stronger entrepreneurial attitude than in previous decades. These are positive outcomes.

However, there is a shortage of valid and reliable evaluation data on such student outcomes at the system level. Using data from the Programme for International Student Assessment (PISA) on the achievements of 15-year-old students in a few subjects as indicators of CfE impact on learners provides a limited reflection of the CfE intentions. Moreover, superficial interpretation of (limited) data on student achievement (as is often done in media) usually results in more confusion and frustration than clarity. As one of the interviewed researchers expressed, "Scotland collects large amounts of data, but they are often not exactly adapted to their subsequent use, or they lack rigorous definition and evaluation" (OECD, 2020[11]). Collecting data is not the same as conducting high-quality research, which contributes to understanding and to offering meaningful feedback and feedforward to the system.

Referring to the potential added value of educational research to curriculum development, there appears to be a relative shortage of design-based curriculum research in Scotland. Most published research is of a descriptive, analytical, conceptual or critical nature. That may be relevant in various ways, but there are a few examples, with the exception of Drew, Priestley and Michael (2016[47]), of collaborative efforts of researchers and teachers to systematically address practical curricular problems in such a way that it contributes to improving curriculum design and implementation, to the professional development of the participants involved and of knowledge growth about those challenges (Mintrop, 2016[48]; Pieters, Voogt and Pareja Roblin, 2019[49]; van den Akker and Nieveen, forthcoming[50]). Thus, the OECD team endorses the International Council of Education Advisers' recent call for more and stronger research-practice partnerships and design-based research, which can occur through various modalities, such as Lesson Study, Teacher Design Teams and Professional Learning Communities. Commonalities among these modalities include starting with analysing practitioners' real-life, context-specific problems; systematic exploration; design and experimentation (usually with iterative approaches); and long-term interaction between practitioners and researchers.

About the amount and quality of resources, teachers – the main actors in daily curriculum design – expressed, perhaps surprisingly, few explicit complaints. Even facilities and time for professional development seemed more or less acceptable, although the politeness of the teachers interviewed perhaps prevented them from expressing strong criticism. Other observers (outside schools) expressed that they thought teachers would need more time for professional learning, for example, by spending less time on classroom teaching and having more time available for professional learning. In particular, collaborative teamwork on school-wide curriculum arrangements and on strengthening pedagogical classroom repertoire was recommended.

The OECD team's impression is that there is some variation across the system in intensity and modes of teacher professional development. There also appears to be some variation in teachers' support from their school contexts, local authorities and the RICs (where applicable).

Conclusion

Scotland's Curriculum for Excellence was a bold initiative from its inception that has progressed and reached schools across Scotland. Its main vision and objectives are still relevant today. It remains valid for its bold, aspirational, future-oriented approach and continues to be an inspiring international example, with its four capacities focused on holistic student learning, which combines knowledge, skills and attitudes for the future. It has served as an example to many countries, and its key message strongly resembles the global vision on education as expressed in the Education 2030 vision of the OECD. CfE allows for reasonable coherence and seems to have been consolidated in Broad General Education for learners aged 3 to 15 years. It has been implemented and adopted across schools up to this age, where the concepts of CfE, the pedagogical approaches, the learning and assessments appear to be well consolidated.

Following two decades since its inception, Scotland should consider renewing its commitment to CfE's bold and relevant vision. A key challenge facing CfE is how to create more coherence and alignment between the curricular vision and goals for learning, a suitable pedagogy and adequate assessment approaches, especially in light of COVID-19, for student learning and progression across their school years. CfE has worthwhile ideals, and its implementation has been accomplished in primary and lower-secondary. The coherence of CfE enactment is less consistent, however, in the Senior Phase (for learners aged 15 to 18 years), where fundamental challenges exist for curriculum and subsequent assessment re-design. Without taking up the task of a re-visioning of CfE in the Senior Phase, the practices in upper-secondary education will keep lagging in its curriculum components (aims, pedagogy and assessment) and will exercise a counterproductive influence on Broad General Education and the transition for students.

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3 Stakeholder engagement at the heart of Scotland's Curriculum for Excellence

In Scotland (United Kingdom), significant efforts have been made to engage stakeholders throughout the lifecycle of Curriculum for Excellence (CfE). Such efforts have contributed to its success. The great degree of stakeholder involvement around CfE has created the conditions for shared ownership and wide support of CfE's vision. However, progress is required at the system level so stakeholders are fully empowered and engaged in the decision-making process. This chapter analyses the progress made and pending issues of engagement in stakeholder involvement, transparency of responsibilities and communication.

An overview of stakeholder engagement with Curriculum for Excellence

In curriculum policy, stakeholders are individuals (e.g. teachers, parents, school leaders, students and politicians), experts in subjects, pedagogy and curricular studies (scientific community), and collective entities (e.g. ministry of education, national agencies, local authorities, teacher unions) concerned with a curriculum. Their engagement refers to the processes via which they get involved, take responsibilities and interact throughout a curriculum's lifecycle, from design to implementation, in daily practice and during reviews.

In Scotland (United Kingdom), the ecosystem around Curriculum for Excellence (CfE) comprises numerous stakeholder groups, bodies and individuals, all very engaged by the curriculum policy's evolutions. The OECD team met with a significant number of CfE stakeholders, who provided their perspective on implementation and explained the way they engage with CfE and with other stakeholders around CfE. CfE stakeholders include practitioners, learners and their parents, national, regional and local government bodies, public agencies, professional unions and associations, and specialist organisations. Specific structures also developed around CfE, resulting in a number of governance committees, advisory bodies and other stakeholder consultation fora that further populate the ecosystem (Table 3.1).

Table 3.1. Overview of major Curriculum for Excellence stakeholders

	Role in education in relation to Curriculum for Excellence
Stakeholders	
Scottish Government's Learning Directorate	Scottish Government department dedicated to the school system and wider learning environment. The Learning Directorate is responsible for promoting quality implementation of CfE; developing the teaching workforce and educational leadership; ensuring infrastructure and access to digital technology; and pursuing performance improvement, innovation and good practice in education overall.
Scottish Parliament's Education and Skills Committee	Monitors education and education policy on behalf of the Scottish Parliament. The Committee investigates specific aspects of CfE and its implementation, provides recommendations and holds the Scottish Government accountable.
Education Scotland	Public agency under Scottish Government authority, responsible for quality assurance and improvement in education. Education Scotland's mandate includes overseeing the implementation and quality of curriculum and assessment; carrying out school evaluations as Scotland's Inspectorate; providing support for teachers and education, including continuous professional development; providing instructional and support materials for teachers in specific areas (such as emotional well-being and raising attainment for all); and conducting research. Education Scotland and predecessors have been key actors of CfE policy developments, monitoring and implementation support since 2009-10.
Scottish Qualifications Authority (SQA)	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 including "National 5", "Highers" and "Advanced Highers", and "National Progression Awards". SQA sits on key governance committees and working groups regarding CfE implementation. It was especially involved in the revision of national qualifications and provision of material in early CfE implementation.
Scottish Credit and Qualifications Framework (SCQF) Partnership	Body managing the SCQF, which classifies and allows for comparing all qualifications available in Scotland into one framework. Awarding bodies such as the SQA use this information to develop course content and assessment. The SCQF Board of Directors includes representatives of College Development Network, Quality Assurance for Higher Education, Scottish Qualifications Authority, Universities Scotland and employers.
Local authorities (LAs)	Local level of government in Scotland. The 32 local authorities and their Directors of Education have statutory responsibility for the delivery of education and its quality. They take part in CfE developments at the national level (e.g. the Curriculum and Assessment Board includes representatives from the Association of Directors of Education in Scotland [ADES]) and support implementation at the school cluster or neighbourhood level in various forms (funding, discussion of subject selection and time allocation, provision of authority-wide CfE guidance, specific support at the school or cluster level). LAs also provide support via the six Regional Improvement Collaboratives.
Regional Improvement Collaboratives (RICs)	Sub-national bodies established in 2017 to promote effective collaboration around educational improvement and equity across local authorities. The six RICs are responsible for promoting educational improvement initiatives (including in the form of school support and professional learning offers for teachers) and supporting collaboration across local authorities, and with schools, Education Scotland and other stakeholders.

	Role in education in relation to Curriculum for Excellence
Teachers and school leaders ("headteachers")	Develop and use own school curriculum based on the CfE framework to support student learning. Most teachers develop their own materials to teach according to the school's curriculum (especially in Broad General Education [BGE]); prepare students for qualifications (in Senior Phase); assess and report on progress; and communicate with parents. School leaders support teachers; lead curriculum design; manage the school and its partnerships; translate policy into school practice. Teachers and school leaders usually collaborate with peers from other schools and with local, regional and national bodies to share practice and further develop CfE.
Teachers' and school leaders' unions	Represent the teaching profession's interests in education policy and professional negotiations and generally support the profession via training and other professional network activities. Union representatives sit on key governance committees and working groups to share their perspective with system leaders, agencies and other stakeholders. Major unions include School Leaders Scotland (SLS) and Association of Headteachers and Deputes in Scotland (AHDS), Education Institute of Scotland (EIS), Scottish Secondary Teachers' Association (SSTA), National Association of Schoolmasters Union of Women Teachers (NASUWT).
BOCSH group	Consortium of senior curriculum managers from half of the 32 local authorities working with national bodies to support curriculum leadership. BOCSH members provide exemplar materials to support local authorities, schools, curricular leaders and teachers engaged in implementing CfE, and highlight good practice in a whole-school approach to CfE in BGE and Senior Phase.
General Teaching Council for Scotland (GTCS)	Independent professional body promoting and regulating the teaching profession in Scotland. GTCS maintains professional standards; sets the requirements and advises ministers for teacher training; supports new teachers during induction; assesses teachers' qualifications and experience; manages the professional register.
Students ("learners")	Participate in learning in school and other settings from age 3 to 18 years and beyond. CfE promotes active participation from learners in their learning and society in general.
Children and young people organisations	Defend children's rights and promote their citizen participation. Scotland's Children's Parliament supports children's participation and engagement, and works with the Scottish Government, local authorities and other public bodies to promote and protect children's rights. The Scottish Youth Parliament aims to represent the democratically elected voice of Scotland's young people and their views of young people on societal issues.
Youth work agencies	Ensure every young person has access to quality youth work opportunities (e.g. Youth Link Scotland, Young Scot). Youth work is part of community learning and development (CLD), whose professionals help people of all ages with their professional orientation and development. National youth work agencies are partners in CfE implementation for diversification of Senior Phase pathways and positive post-school destinations, career education and other activities related to the "world of work".
Parents and parent organisations	Parents (and guardians) participate in students' education, are informed by schools and can take part in schools' parent councils. Organisations support parent engagement with their local schools (e.g. via parent councils) and represent parent interests in national policy making. The National Parent Forum of Scotland (NPFS) represents parent councils across Scotland, with national and local government and other organisations. Connect supports parents' groups nationally to get involved in schools.
Higher education institutions (universities)	Nineteen institutions offer higher education in Scotland. University representatives sit on the Curriculum and Assessment Board; work with other key stakeholders to ensure CfE prepares learners for university and qualifications provide clear pathways to learners. Universities Scotland works for and represents the 19 institutions, and the Scottish Council of Deans of Education represents their School of Education.
Education researchers	Investigate various themes in education, including CfE. Researchers provide central insight for CfE developments, feed into the evidence base for educational and policy leadership and practices and contribute to informing and advising system leaders. They sit on key governance, advisory and working committees and participate in specific programmes contributing to CfE developments.
Further education institutions (colleges)	Twenty-six colleges offer further education in Scotland. College representatives and their organisations participate in CfE developments and implementation. For example, Colleges Scotland is part of the Curriculum Narrative Strategic Engagement Group (2018). Colleges Development Network sat on the CfE Management Board (2007-17) and provides colleges with trainings, events and specialist projects.
Scottish Funding Council (SFC)	Public arms-length body responsible for funding teaching and learning provision, research and other activities in colleges and universities. SFC is identified among the national partners for CfE implementation, including to fund teacher professionalisation aligned with CfE priorities, support Developing the Young Workforce: Scotland's Youth Employment Strategy (DYW) and other programmes to implement CfE priorities in relation with colleges, facilitate partnerships between schools, local authorities and colleges, and contribute to data collection in the college sector.
Employers	Work with colleges, schools and other stakeholders (e.g. Skills Development Scotland) to provide work-based experiences in line with CfE.
Skills Development Scotland (SDS)	Helps individuals manage their career and build employability skills from school onwards. SDS works with employers under ministerial guidance on a national, sectoral, regional, local and individual basis to recognise and articulate current and future skills needs, and to engage with the skills system to cater to those needs.

	Role in education in relation to Curriculum for Excellence
Governance committees, advisory bodies and fora for stakeholder consultation	
Scottish Education Council (SEC)	Main forum for oversight of education improvement since 2017. The SEC provides strategic advice to ministers on education improvement and aims to lead and support collaboration between system leaders and key stakeholders to deliver education. The SEC links up with the Curriculum and Assessment Board and the Strategic Board for Teacher Education and is informed by the International Council of Education Advisers.
Curriculum and Assessment Board (CAB)	Main forum for oversight of curriculum and assessment activity in Scotland since 2017. The CAB oversees and leads the curriculum and assessment policy framework in Scottish education; considers actions needed to ensure CfE delivers for all; supports the SEC but is directly accountable to Scottish ministers. It replaced former CfE management groups. It is chaired jointly by the Director of Learning, Scottish Government and Education Scotland, and members include teachers' professional associations, colleges, universities, scholars, parent associations, SDS, and CLD representatives.
International Council of Education Advisors (ICEA)	Established in 2016 to advise the First and Deputy First Ministers on how best to achieve excellence and equity in the Scottish education system based on international best practice. ICEA members are education experts from Scotland and worldwide.
Education Leaders Forum	Established in 2018 to capture the views of a wide stakeholder group on the development of the education system. It is chaired by the Deputy First Minister and Cabinet Secretary for Education and Skills and has input from young people, teachers' professional associations, scholars, parent associations, SDS, and CLD representatives.
Teacher Panel	Established in 2016 to provide views on de-cluttering, workload and bureaucracy in order to enhance the effectiveness of the interaction between pupil and teacher.
Strategic Board for Teacher Education	National forum for discussion between key education stakeholders on teaching standards and teacher education. The Board oversees and evaluates reforms to teacher education from the perspective of the *Teaching Scotland's Future* report (2011).
Scottish Learner Panel	Comprised of 30 children and young people from nine school settings from across Scotland. The panel deliver their views on education policy to the Scottish Government. The panel met on five occasions in 2018-19 and published a final report.
Commission for Widening Access to University	Gathers Scottish Government officials and stakeholders to tackle socio-economic inequality in higher education by leading the implementation of recommendations contained in the final report of the Commission on Widening Access.

Source: The roles summarised here are based on official documentation and stakeholders' views collected during OECD interviews (OECD, 2020[1]).

Stakeholder engagement, and more specifically, involvement, communication and transparency matter in the implementation of Curriculum for Excellence for several reasons.

First, in Scotland, as around the world, education systems are now characterised by multi-level governance, with multiple actors operating at different levels, whose links to each other are to a certain extent fluid and open to negotiation. Attention to stakeholder engagement in education policy implementation has increased as a result of three trends: a greater awareness of the importance of education quality for a country's future; new technologies allowing citizens to be more vocal about policy matters outside of traditional engagement mechanisms; and high degrees of citizen participation as a result (Burns, Köster and Fuster, 2016[2]). In addition, governance arrangements have become more complex and decentralised, with greater engagement in policy and implementation processes across different levels of education systems (Viennet and Pont, 2017[3]). Against this backdrop, different stakeholders are more likely to exert their agency, either to support or oppose curriculum changes, and influence the organisations or communities they are embedded in (Lemke and Harris-Wai, 2015[4]).

Second, collaboration, consensus, co-design, partnership and empowerment are central to the rhetoric around CfE and education in Scotland. They are also important to implement if curriculum processes are to respect CfE principles. In particular, school-based curriculum design requires meaningful engagement to develop shared meaning and ownership of CfE concepts and empower key curriculum actors. Such meaningful forms of engagement imply trust and allow for collaboration and practice sharing between stakeholders; clarity on whose responsibility it is to provide school support and professional learning; and clear two-way communication about policy evolution, priorities and difficulties at local and national levels.

Finally, ongoing needs for adjustment throughout the CfE lifecycle also require shared meaning, deep involvement of stakeholders, trust and effective decision making for effective change. In a system seeking collaborative leadership and empowerment, decision making is not top-down but consists of inclusive and fruitful discussions between stakeholders who know and have the resources to assume their responsibilities, which results in effective and trustworthy decisions.

Significant efforts have been made to engage stakeholders throughout CfE's lifecycle (2004-present), which contributed to some successes with CfE and shall be explained. However, issues related to stakeholder engagement remain that complicate CfE implementation, and at times even hinder it. The following sections analyse the progress made and pending issues of engagement in terms of stakeholder involvement, transparency of responsibilities and communication.

From inclusive involvement to collective ownership of Curriculum for Excellence

Involvement refers to the opportunity stakeholders have to influence and shape the policy, whether it is through its design or implementation. It is determined on the one hand by government-created channels to encourage stakeholder participation, and on the other hand, by stakeholders' willingness and capacity to take part in the process. Stakeholders can get involved in many different ways, such as through public or internal consultations, boards, councils and committees, union dialogues, networks, surveys, research projects and publications (OECD, 2020[5]). Key stakeholder involvement in education policy development and implementation can help cultivate a sense of joint ownership over policies and hence build more effective and relevant reforms (Finlay, 1998[6])).

The process preceding and developing CfE aimed to engage stakeholders widely and in a more involved way than previously in Scotland. In the past, the national curriculum was essentially developed following approaches from the top down, providing central guidelines and using cascade models of staff development to help schools implement those guidelines. In comparison, the approach to CfE development aimed to engage practitioners from the beginning, involving them in thinking about the educational aims, values and classroom practice. The engagement consisted in work about various components of CfE carried out in collaboration between the Scottish Executive, Learning and Teaching Scotland, the Scottish Qualifications Authority and Her Majesty's Inspectorate of Education with involvement by local authorities, schools, colleges, professional associations and scholars (Scottish Government, 2006[7]).

Consultation and collaboration are at the core of CfE processes, as much in policy design as in curriculum delivery. As a result, stakeholders get involved frequently and intensely with CfE, which, as acknowledged to the OECD team by system leaders, top advisory groups and practitioners, marks remarkable progress from a time when there was admittedly a lack of engagement and support across the system (OECD interviews). An extensive range of options for stakeholders' involvement with CfE exist, both at the initiative of system leaders and other stakeholders themselves. This tendency emerged from the beginning of CfE, through its development, and continues to characterise the stakeholder ecosystem (Scottish Government, 2008[8]; 2021[9]). Stakeholders have been involved in the design of CfE and are still involved in its daily implementation and ongoing evolution via:

- participation in governance committees, such as the Curriculum and Assessment Board, formerly CfE Management Board
- feedback provision through advisory and consultation entities, such as the International Council of Education Advisers (ICEA), Learner Panel
- expression of organised interests through platforms and representative bodies, such as teacher unions, children and youth organisations, parent organisations

- discussion between professionals and education leaders at various levels, including in ADES, Convention of Scottish Local Authorities (COSLA), BOCSH group and initiatives of practice sharing between schools
- decisions made by school communities as part of the ongoing process of curriculum design
- submissions to Parliamentary enquiries, for instance via the Parliamentary Committee on Education and Skills
- research projects and publications around CfE.

The high degree of stakeholder involvement contributed to wide support for CfE as a direction of travel for Scottish education, which matters greatly considering this vision fits both Scottish ambitions and what the international community understands as essential for learners in the 21st century. Both the stakeholders met and the documentation reviewed by the OECD team show broad support for a curriculum policy that helps students develop into successful learners, confident individuals, responsible citizens and effective contributors (the "four capacities"); and that enables school communities to design their curriculum and teachers to teach in the way they see best fit their students' needs (Priestley, 2018[10]; Priestley and Minty, 2013[11]). A clear signal of the width of this support is that critiques of CfE tend to highlight the way the policy is implemented as the main issue, especially in secondary education, rather than the vision it pursues. The counter-proposals to CfE that the OECD team could observe consist more of going back to CfE's vision and basic principles and assessing whether current practices realise them, than questioning the basic principles altogether (Humes, 2020[12]; Commission on School Reform, 2020[13]; Biesta G, 2015[14]; OECD, 2020[1]).

The many ways to get involved with CfE aim to offer various kinds of stakeholder participation, from information and consultation to collaboration and empowerment. CfE is described by policy makers as being co-designed and delivered collaboratively and by consensus through joint planning, implementation and monitoring between local and national partners (Scottish Government, 2021[9]). Stakeholders appreciate the constant efforts made by system leaders to engage with them and welcomed the many opportunities they have to communicate their perspectives on CfE. Referring to the development of CfE, several practitioners and local officials acknowledged that the policy had been "developed from the ground up", with national authorities guiding the process and practitioners getting involved in developing and testing the learning areas (OECD, 2020[1]). Extensive evidence highlights that consensus between stakeholders is an important factor for the successful implementation of policy reforms (Corrales, 1999[15]; Connell and Klem, 2012[16]; Viennet and Pont, 2017[3]). Enabling this consensus to extend to a sense of shared values and shared mission can improve educational outcomes (OECD, 2018[17]).

Like Scotland, other education systems established the principle of local design, which implies that schools and their community design their own school curriculum within the new national framework. This principle enshrines stakeholders' engagement throughout the policy lifecycle. Local curriculum design suggests that schools should engage with students, parents, local actors and other schools, both when they change and implement their curriculum. In New Zealand, for instance, the Ministry of Education emphasises seeking inputs from students, parents and local actors as a high-impact practice for local curriculum design. As a result, educators are expected to work together with parents and the community to design a curriculum relevant to their local context (New Zealand Ministry of Education, 2019[18]).

With more than a decade of implementation, CfE shows that continuous and proactive involvement by stakeholders is central to the policy's functioning. CfE implied significant shifts in the way education is delivered in Scotland, including greater professional agency and progressive empowerment of schools (see Chapter 4 for a detailed analysis of the policy environment).

"Empowerment" is, to some extent, the ultimate form of stakeholder engagement and adequate to core aspects of CfE, such as school-based curriculum design. Stakeholders appreciated the efforts made by national authorities to help empower schools and the profession. Initiatives of enquiry-based, continuous professional development (CPD, also referred to as "professional learning") and professional collaboration

were especially highlighted as having a beneficial impact on teachers' deep understanding of CfE and self-efficacy in curriculum design. Scholars interviewed by the OECD team described, for instance, that enquiry into teachers' own practice seemed to empower them to exert their professional agency and to embed it into practice, although these developments still needed to be consolidated to be fully embedded in daily curriculum design practices (Priestley and Drew, 2019[19]; Drew, Priestley and Michael, 2016[20]; OECD, 2020[1]).

CfE requires collaboration between stakeholders, both as part of governance and daily implementation of schools' curricula, given the diversity of knowledge, skills and values students are expected to gain to develop the four capacities. School practitioners and local actors consistently reported to the OECD team that the best curriculum experiences for students were provided where there was communication and collaboration within the school (between teachers, school leadership and students) and with school partners.

A central characteristic of CfE is its attempt to offer and promote diversified pathways to fit what learners want and need to study. In this, collaboration and partnerships between schools and their partners were especially highlighted as a key factor of success. The OECD team met, for instance, with practitioners and learners from two high schools who entered a formal partnership that significantly widened the courses on offer for students of the smaller school while creating systematic professional exchanges that benefitted both schools. Other ways to offer diverse learning to students included schools' partnerships with colleges and universities (for additional subjects and qualifications); with Skills Development Scotland (for career education); and with local charities and firms (for work-based experiences, including apprenticeships). CfE is seen by schools and some actors from higher and further education as an underpinning factor to make the tertiary sector more coherent (Box 3.1).

Box 3.1. Multi-stakeholder partnership to diversify learner pathways

Learning outside schools, in the community

Partnership is central to the everyday implementation of schools' curricula within the CfE framework, including to fulfil CfE's aim to diversify the possible pathways learners can shape and take to fit their ambitions. One of the many possibilities offered with CfE curricula is for learners who do not feel at ease in a very academic setting, to design a flexible learning setting that fits their needs and preferences while keeping them interested in learning. The OECD team met with representatives from the CLD sector, one of schools' many possible partners for diversifying learning experiences. According to CLD actors, the quality of outcomes and experiences for learners depended largely on whether there were strong partnerships between schools, CLD actors and third-sector providers (e.g. football clubs). These partnerships allow for designing a personalised curriculum, starting where the young person is and what his or her needs are. A customised curriculum can be delivered in a combination of the school setting, a college and/or a community setting. Some of the curricula initially developed for one young person can be scaled up into a larger pathway, e.g. partnership programmes, homeschool learning partnerships using Pupil Equity Funding, Young Men's Christian Association (YMCA), summer/Easter programmes.

… and at other education levels

Another possible type of partnership for schools to diversify their learners' experience is with colleges and universities. Both colleges and universities help widen the perspectives of students in upper-secondary education and provide special programmes (in universities) and early courses (in colleges) to help school students adapt their learning styles. Where partnerships are strong, schools plan to leave time for school students to engage with college courses and beyond, becoming part of the college communities.

Note: Stakeholder interviews performed by the OECD team for the assessment.

Beyond a great degree of involvement and collaboration, CfE's philosophy required that stakeholders, and especially teachers and school leaders, take ownership of the curriculum policy, a central factor for its successful implementation (Mikser, Kärner and Krull, 2016[21]).

Curriculum ownership implies two things for stakeholders, according to Pierce, Kostova and Dirks (2003[22]). First, it provides individuals with a sense of satisfaction related to psychological comfort and security, a conducive condition for stakeholders to support and carry out a new curriculum. Second, ownership is accompanied by the willingness to assume responsibilities, risks, and sacrifices. Experienced responsibilities motivate stakeholders to invest time and energy to advance the cause of curriculum reform.

In order to capture stakeholders' perspectives on these two aspects of ownership, the OECD team asked the question, "Who owns CfE?" during interviews. Responses consistently pointed in a similar direction: all key stakeholders felt they shared ownership of CfE to some degree. They all agreed that this sense of ownership should be felt first by teachers, school leaders and learners, which was the case in an increasing number of schools. However, stakeholders also consistently pointed out that this sense of collective ownership, although in line with CfE's philosophy, was misaligned with the actual distribution of responsibilities, trust and influence in decision making (OECD, 2020[1]). This possible misalignment will be investigated further in the following section.

CfE largely shifted the locus of curriculum design into schools, which calls for stakeholder involvement to go beyond consultation towards collaborative decision making. The literature on stakeholder engagement and participation in public decision making classifies several stakeholder involvement mechanisms that have different purposes and various degrees of intensity (Arnstein, 1969[23]; Pretty, 1995[24]; White, 1996[25]). The classifications vary around the following, by order of intensity (International Association of Public Participation (IAP2), 2014[26]):

- information
- consultation
- involvement
- collaboration
- empowerment.

Most Scottish stakeholders take available opportunities to communicate their views (through consultation and involvement in working groups and governance committees), yet there seems to be a limited impact of these views on effective enhancements to CfE implementation. Stakeholders from several groups reported to the OECD team a general feeling that their involvement and collaboration in decision-making processes was rather informative and removed from the actual decisions made (OECD, 2020[1]). For a system that engages quite systematically with stakeholders, it is impossible to satisfy all views on every issue: some decisions must be taken, and compromises reached. Yet, when seeking consensual and collaborative decision making and delivery in a system, trust between system leaders and other stakeholders is essential. Although some of the stakeholders interviewed were already involved in

governance committees and thus close to decision making, they did not necessarily trust that their participation had real weight on decision making. Trust is built through repeated interaction in which actors show trustworthy behaviour (Cerna, 2014[27]). System leaders (whether at the national, regional or local level) need to, therefore, nurture this trust so stakeholder engagement fulfils its potential for CfE implementation.

Two aspects of stakeholder engagement around CfE seem to weaken this potential: the clarity of purpose of engagement initiatives and consistency in terms of using stakeholders' input. According to the stakeholders interviewed and observations by the OECD team, the purpose of engagement initiatives around CfE is not always clear nor consistent. Clarifying the purpose of engagement initiatives helps adjust stakeholders' expectations of the impact of their contribution. In a consultation, stakeholders may expect their input to feed into the reflection prior to a decision but not determine it. As part of a governance committee or group intended to participate in decision making, stakeholders may expect their input to weigh equally with their counterparts'. 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.

The Scottish Empowerment Agenda, aligned to support the teaching profession's role in CfE, had clear effects on school leadership empowerment. The OECD team noted several elements of this empowerment through its interviews, including headteachers' leadership practices in schools' curriculum design and implementation processes, and how they felt they were able to interpret and prioritise policies that cater best to the needs of their staff and students (OECD, 2020[1]). Policy progress made to advance the Empowerment Agenda include publishing a draft Headteachers' Charter; further developing the Regional Improvement Collaboratives (RICs); elaborating revised Devolved School Management Guidelines; proposing new career pathways for teachers; and concluding an enhanced pay agreement for teachers, all of which in pursuit of reinforcing commitment (Scottish Government, 2021[9]; Education Scotland, 2021[28]).

Additional initiatives aim to support teacher empowerment and agency, including with curriculum design. The Scottish national professional learning model seeks to support teachers' agency through continuous professional development (such as the Teacher Leadership Programme) and professional standards. Further supported by RICs and local authorities, this support for agency translates into strong local examples of teacher empowerment and distributed leadership. For instance, the South Lanarkshire Council has encouraged its school leaders to empower their teachers to lead improvement work and developments. For many schools, this has meant making a teacher the "lead" on an element of the annual School Improvement Plan, of which priorities are decided on collegiately. For example, teachers have been leading the development of outdoor learning, a curriculum area or another aspect of school life such as community engagement. This engagement is intended to help empower teachers to lead training, communicate with parents and decide on next steps with regard to their lead role. Most schools will dedicate ring-fenced time to initiatives allowing teachers to plan and develop projects within their schools (Scottish Government, 2021[9]).

The Empowerment Agenda does not yet seem to have allowed the same empowerment for teachers as for school leaders. This is possibly due to the fact that many of the initiatives are still recent policy endeavours. Several of the stakeholders interviewed acknowledged that system leaders' efforts to support the empowerment of school leaders and teachers are going in the right direction. However, the way the Empowerment Agenda is structured seems to prevent the very agency, both individual and collective, that that empowerment is about: according to the stakeholders interviewed, empowerment is handed to people (OECD, 2020[1]).

Scottish stakeholders expect their input to be taken into account effectively and in agreement with the purpose given to the initiatives they participate in. Clarifying how decisions are reached and highlighting

how evidence has been considered help make decision-making processes transparent and comprehensible. Specific tools include publicly accessible documents and exchange formats that discuss decisions and how they were reached (Köster, Shewbridge and Krämer, 2020[29]).

The Scottish education system made notable progress in creating space and time for a wide range of stakeholders to contribute to discussions about education policy, which suggest a transition from traditional approaches of direction from the centre to more openness and collaboration. However, these changes seem not to have granted equivalent degrees of influence to stakeholders most recently involved, as compared to that yielded by more traditional actors, including civil servants and officials at various levels of the system (Humes, 2020[12]). Table 3.1 includes the range of governance committees related to CfE in which stakeholders have been engaged. The OECD team noted genuine commitment to open and transparent collaboration in its interviews, but stakeholders participating in various committees, boards or panels expressed concerns that their input had little impact on the advice provided and the decisions made in the end (OECD, 2020[1]). On the one hand, this may be due to the influence of traditional actors on decision making, which has been in practice for a longer period of time than for other stakeholders. It may also be due to the challenges that arise from integrating different perspectives systematically and purposefully into policy making. This difficulty in integrating contributions systematically sends confusing messages to stakeholders within a system that seeks collaborative decision making. This concern was raised especially around the learners' perspective. The OECD team was repeatedly told that although a number of initiatives existed to get learners involved around CfE, both at school and the national level, stakeholders found that the outcomes were not taken into account enough within decisions.

> *"We have heard so many times what learners want… It is time for adults to act on what we already know." (OECD, 2020[1])*

Making space for student voices and taking students' input into account is central in curriculum reform (Mitra, 2007[30]; OECD, 2020[31]). Successful examples of stakeholder involvement around curriculum issues nurture trust with stakeholders and build upon clarity of purpose and consistency. Box 3.2 highlights examples of two different but similarly promising processes of stakeholder involvement: Ireland's National Council on Curriculum and Assessment (NCCA) review of upper-secondary education and Wales' co-construction process of its new Curriculum for Wales.

Box 3.2. Stakeholder involvement around upper-secondary education in Ireland and Wales (United Kingdom)

Stakeholder involvement around upper-secondary education in Ireland

Ireland's National Council on Curriculum and Assessment (NCCA) initiated a comprehensive review of its upper-secondary education (Senior Cycle), which had not been revised in decades. The aim was to engage all key Senior Cycle stakeholders early in the policy process, to gather their perspective and to report to the Minister based on their contributions. More specifically, the review aimed to get a range of perspectives on the purpose, future, structure and functioning of Senior Cycle education.

The review was conceived around three phases. The first phase (2016/17) consisted of identifying topics to explore in relation to upper-secondary education, exploring the various approaches to conduct the Senior Cycle review as well as conducting a comparative study with other jurisdictions. The second phase (2018/19) involved two full cycles of reviews at both school (through school-based reviews) and national levels (through national seminars). The Economic and Social Research Institute (ESRI) served as a scientific adviser and contributed to analysing all the collected data throughout the process. Each cycle of the school-based reviews concluded with a series of national seminars.

The first series of seminars was built mainly on presenting the results from Cycle 1 school-based reviews. In response to participants' feedback on these first seminars, the NCCA re-designed the second series of seminars to shorten the presentation time and allow more time for discussions among the participating stakeholders. At the end of each seminar series, the NCCA published a bulletin with the results and sent this to schools and stakeholders. In addition, all materials produced in this review, and discussions, are published online for the general public to consult.

The third phase (2019) consisted of a round of public debate and discussions around a consultation document produced by the NCCA from the information collected in the first and second phases. An advisory report will be prepared once the third phase of the review is completed, which will be presented to the Department for Education and Skills to inform its decision about whether and how to change the Senior Cycle curriculum.

Co-construction of curriculum policy in Wales (United Kingdom)

As it started reforming its curriculum policy, Wales (United Kingdom) also initiated an altogether new approach to education policy making in its system. Co-construction consists of continuous collaboration with stakeholders from across the education system in policy making. The curriculum policy in Wales has been co-constructed from the early stages of conception, effectively developing the curriculum based on the conjunction of practitioners' knowledge, Pioneer schools' experience and experts' input. The widespread and systematic use of co-construction in Wales is commendable.

Three key mechanisms have supported co-construction throughout the policy process: the Pioneer Schools Network, working groups and consultations. While policy co-construction requires a significant investment in time and effort in the short term, it also encourages stakeholders to collaborate, trust each other, and own and support reforms in the longer term. As the planner and co-ordinator of education policy committed to co-construction, the Welsh Government has to maintain a challenging equilibrium between providing the necessary guidance for all other stakeholders to act in a co-ordinated manner and leaving enough space for them to take ownership of the new curriculum.

Source: OECD (2020[32]) *Education in Ireland*, https://doi.org/10.1787/636bc6c1-en. OECD (2020[33]) *Achieving the New Curriculum for Wales*, https://doi.org/10.1787/4b483953-en.

The great degree of stakeholder involvement around CfE creates both the conditions for shared ownership and wide support of CfE's vision and a risk of confusion if stakeholders have little transparency on where their responsibilities lie compared to the roles and responsibilities of other stakeholders.

Responsibilities for more transparent engagement with Curriculum for Excellence

Transparency of responsibilities refers to a set of measures that enable multiple stakeholders involved in the policy implementation process to know what everyone's role is and to be able to track their own and others' progress throughout the implementation period. A transparent process fosters trust among stakeholders, is collective, and involves stakeholders in defining their roles and monitoring their performance. Transparency of responsibilities and accountability mechanisms is essential for effective decision making and for stakeholders to find the self-confidence and support to implement CfE, especially within complex governance of the existing system. Ambiguous or overlapping responsibilities and roles can lead to confusion, and considerable effort may be needed to overcome initial misunderstandings and associated anxiety. The question of which actors at which levels should be accountable for which outcomes and how to resolve potential accountability tensions is a challenge for many education systems (Burns, Köster and Fuster, 2016[2]).

Curriculum for Excellence establishes that governance of, and accountability for, the curriculum in Scottish schools is a shared responsibility between the Scottish Government's Directorates, national bodies, including SQA and Education Scotland, local government and schools. The Scottish Government sets the national policy context and is accountable for system performance. Advisory boards and committees such as the Curriculum and Assessment Board (CAB) and the International Council of Education Advisors (ICEA) feed advice into the Scottish Government's decision-making process. Education Scotland and SQA support implementation and ensure the quality of the curriculum and qualifications, respectively. Local authorities have a statutory responsibility for the delivery of education and its quality at the local level and are accountable locally for the nature and quality of delivery and outcomes (Scottish Government, 2021[9]).

School leaders (referred to as "headteachers" in Scotland) are responsible for ensuring a curriculum that meets the needs of children and young people in their schools. As per Scotland's Empowerment Agenda and the Education Reform Joint Agreement, school leaders are the leaders of learning and teaching in their schools, "senior officers of the local authority and have operational responsibility for the service they provide, therefore the majority of decisions should be made at school level". As such, school leaders are invested with wide responsibility for leading the curriculum design process of their school in line with CfE, and working collaboratively with the local authority, partners, teachers, learners and their parents, and other schools on curriculum design and school improvement (Scottish Government, 2018[34]).

Sharing responsibility for CfE with schools, teachers and learners as central owners aligns with CfE principles. As the OECD team observed, stakeholders generally agree that CfE relies on collective responsibility. Stakeholders agree that schools and the profession should hold responsibility for conception, implementation and outcomes of their own curricula, provided the rest of the system fulfil their own responsibilities (including local authorities, RICs, professional networks and unions, national bodies and the Scottish Government) to support schools and the profession within a clear policy framework, through curriculum delivery and policy changes. Admittedly, the Scottish Government and its Cabinet Secretary for Education and Skills retain political responsibility for the progress of CfE as a major education policy (OECD, 2020[1]). This commitment to shared responsibility signals progress towards a form of "leadership from the middle" that a former OECD review called for in Scotland. Leadership from the middle is characterised by different organisations taking responsibility to drive educational improvements on behalf of the system and therefore relies on transparency of responsibilities (OECD, 2015[35]).

Education systems find various ways to distribute responsibility around curriculum policy and implementation. With CfE shifting curriculum design to schools and teachers, and willing to evolve toward a more trust-based system of accountability, the example of Finland may be of interest (Box 3.3).

Box 3.3. Trust-based transparency in Finland

Finland has consistently ranked among the top-performing education systems since the beginning of the 21st century. Among the factors of its success, Finland's culture of trust, co-operation and responsibility underpin the system's high performance. The National Board develops its strategic guidelines on educational funding, legislation, evaluation, and curriculum content based on educational research and through consultation and discussion. As such, the central authority steers but does not prescribe in detail the national curriculum. Instead, trusted teams of highly qualified teachers effectively write most of the curriculum together at the local level to adjust to their students within the national framework.

Trust in the profession and in school leaders owes, on the one hand, to their high qualifications, expertise and widespread commitment and responsibility. On the other hand, trust is actively built through deliberate structures and initiatives. These structures combine horizontal and vertical teamwork, networking, participation, target setting and self-evaluation. Interventions from the top are

most often replaced by co-operative problem solving, and relationships with hierarchies are appeased.

Instead of top-down external interventions that concentrate on issues such as closing achievement gaps or raising performance, high performance and equity levels are a consequence of dynamic learning systems where highly qualified and responsible professionals produce these results for themselves.

These relationships of responsibility, co-operation and trust allow Finland's systemic leadership to follow common strategic orientations while responding to local specificities.

Source: Hargreaves, A. and D. Fink (2008[36]), "Distributed leadership: democracy or delivery?", https://doi.org/10.1108/09578230810863280.

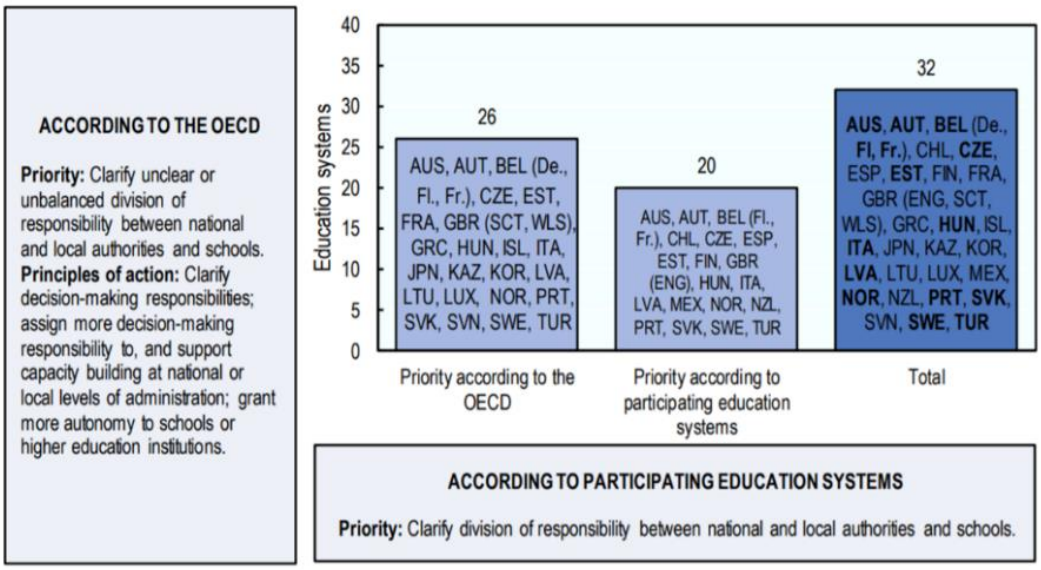
Divisions of responsibility between central government, local governing authorities and schools in policy making, is an ongoing question for education systems. In a recent survey about education policy priorities, OECD countries highlighted the need to clarify responsibilities as a pressing issue. Responsibilities broadly included decision making about teacher recruitment, salary increases, school budgets and curricular content (OECD, 2016[37]). As shown in Figure 3.1, between 2008 and 2019, this policy priority was identified in at least 32 education systems, either by the OECD in previous country-based work (26 education systems), by participating education systems (20 education systems), or both (14 education systems). Clarifying this division was considered a priority in three UK systems, including England, Scotland and Wales (OECD, 2019[38]).

The stakeholders interviewed noted that a shared responsibility of CfE has yet to be reached at the system level. To the OECD team's question, "Who owns CfE?" stakeholders signalled their sense of shared ownership and highlighted its misalignment with the distribution of responsibilities. CfE ownership was most often described as fragmented, with only some schools having complete ownership while others lacked confidence and empowerment. The general perspective was that too many stakeholders claimed ownership of CfE, on the one hand, and that the actual responsibilities that come with such ownership were unclear, on the other.

> *"At the beginning, it seemed like everybody wanted to produce their own perception of what CfE was, how it should be delivered, instead of having one. There were too many chiefs and not enough Indians."*
>
> *"It has to be a collaborative ownership, but at the moment, there is too much political ownership, which is disturbing."*
>
> *"We never managed whole ownership of the CfE system completely, partly because we never got the metrics right for CfE success." (OECD, 2020[1])*

Figure 3.1. Clarifying the division of responsibility between the levels of an education system, 2019

Number of participating education systems in which the division of responsibility is considered a priority according to either the OECD or participating education systems.



Notes: For priority "according to the OECD", see OECD (2019[38]), Annex A (OECD publications consulted) and Reader's Guide (years covered). "Principles of action" refers to a component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally. Priority "according to participating education systems" is based on responses to *Education Policy Outlook (EPO) Surveys* 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the *Education Policy Outlook (EPO) Country Profiles* published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide). Regarding comparing previous OECD analysis and country responses, education systems highlighted in bold are those where the policy priority was identified by both the OECD and the education system.
Source: OECD (2019[38]), *Education Policy Outlook 2019: Working Together to Help Students Achieve their Potential*, https://doi.org/10.1787/2b8ad56e-en.

StatLink https://doi.org/10.1787/888934240845

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. Along with trust, transparency is essential to inspiring ownership and supporting sustained implementation (Burns, Köster and Fuster, 2016[2]). Opacity of responsibilities can harm CfE to the extent that it can be difficult for stakeholders to address the relevant interlocutors. As a result, schools' needs might go unaddressed, or alternatives to the system in place might be found, which contributes again to the confusion of roles and responsibilities.

The CfE-related responsibilities of different natures – policy governance, political responsibility, everyday implementation – are described on paper, but the OECD team noted a lack of clarity in their definition and distribution between stakeholders. In practice, this lack of clarity can be noted at almost all levels of the education system. Stakeholders met by the OECD team highlighted the duplication of functions between different groups. They also emphasised a need for clarity about the roles and responsibilities of each actor and their boundaries, especially between Education Scotland and SQA, RICs and local authorities, and between schools, local authorities and central government (when it comes to curriculum design) (OECD, 2020[1]).

Parliamentary enquiries conducted in 2017 looked into the roles of key education bodies, with specific attention to the link between their overall role in education and their responsibilities in CfE implementation.

The enquiries found, for instance, that the distribution of responsibilities between Education Scotland and the Scottish Government in the different areas of development and implementation of CfE required more clarity. Response to the enquiry included a commitment by the Cabinet Secretary to undertake a review of the issue (The Scottish Parliament Education and Skills Committee, 2017[39]).

The distribution of CfE-related responsibilities between local authorities and Regional Improvement Collaboratives also lacks clarity in practice. The 32 local authorities and their Directors of Education have statutory responsibility for the delivery of education and its quality. As mentioned above, local authorities participate in CfE developments at the national level and support implementation at the school cluster or neighbourhood level in various forms. Established in 2017/18, RICs intend to promote local authorities' collaboration, thus increasing their reach and effectiveness in supporting schools and working from a meso-level to build capacity in teachers and curriculum leadership across the system. This initiative was launched in part in response to the 2015 OECD recommendation to "strengthen the professional leadership of CfE and the 'middle'" and "develop a coherent strategy for building teacher and leadership social capital" (OECD, 2015[35]). A full review of RICs' performance is expected to report in 2021. In general, the practitioners interviewed by the OECD either had difficulties identifying the responsibilities of local authorities compared to that of RICs, or they were not aware of RICs' role altogether:

> *"If you ask most teachers and headteachers across Scotland, they don't see what RICs are about. The RICs discuss a lot, but between other players, of school improvement. It is a nice idea, but not adding much for practitioners. They forgot that local collaboration happens at local level, and that the funds used for RICs would be much more useful at local level." (OECD, 2020[1])*

In some instances, however, evidence reported to the OECD shows that RICs hold potential to increase collaboration across local authorities, as some have already achieved greater and needed collaboration:

> *"For instance [a particular RIC] has provided great support for schools to ask pupils what they want every year and use that to plan their curriculum areas and industry partnerships to offer greater choice in a cohesive manner through the eight local authorities." (OECD, 2020[1])*

The responsibilities assumed by local authorities vary significantly across Scotland, and similarly for Regional Improvement Collaboratives, which accentuates the lack of readability of the system around CfE. The majority of legal responsibility for education sits with local authorities. Theoretically, such a system can help in the context of a curriculum policy that, like CfE, seeks flexibility to best answer students' needs while not letting full responsibility rely on schools alone. However, the variability observed in local authorities' approaches means that decisions that one school leader has the power to make in a given local authority can be taken by the local authority itself elsewhere in Scotland. As highlighted in both OECD interviews and other reports, this adds to the system's lack of transparency for teachers, school leaders and parents (Scottish Government, 2017[40]).

> *"Education is devolved to local authorities. So the government sets the objective, but the strategy to achieve it is up to local authorities, who all have their own understanding, which often results in very different strategies. So teachers themselves have to interpret their local authority's strategy to deliver." (OECD, 2020[1])*

Over the last few decades, many OECD countries have decentralised their education systems, giving schools and local school authorities greater autonomy to respond more directly to citizens' needs. Yet ministries of education remain responsible for ensuring high-quality education for all. Traditional forms of accountability, based on a vertical hierarchy between lower decentralised levels and central ministries, are increasingly being complemented by new forms of accountability that involve the voices of more stakeholders. The most successful systems are able to constructively combine the multiple sources of information to ensure adequate transparency and adherence to achievement goals as well as reflect broad societal aims for education (Burns, Köster and Fuster, 2016[2]).

The case of Sweden's shift of education decision-making responsibilities to the municipal level in the early 1990s speaks of the importance of clarifying responsibilities among stakeholders. The reform increased

municipal autonomy and devolved virtually all responsibility regarding education to the municipal governance structures, in a system with a strong tradition of vertical accountability. However, lacking a clear understanding of new responsibilities and roles of local stakeholders, municipalities did not change their processes as envisioned. Instead, municipalities generated a variety of different structures and strategies for educational governance, which inhibited mutual learning and were often unsuited to internal evaluation and meeting local demands (Burns, Köster and Fuster, 2016[2]).

One key area in which school practitioners wish there were more transparency on responsibilities is in professional learning and support for curriculum design. Some opportunities are offered through Education Scotland and the RICs, as well as through local authorities' own support strategies. However, teachers also seek opportunities via national professional associations (such as EIS, SSTA, SLS, NASUWT, AHDS) and programmes with universities, private foundations, or selective professional networks (such as BOCSH). Although there are many development opportunities, they depend most often on teachers' own knowledge and research. Repeated requests by practitioners were made during interviews with the OECD team for more clarity on providers of quality support for curriculum design, and a more streamlined offer (OECD, 2020[1]).

Inherited from the intense involvement of stakeholders in Scotland, a significant number of bodies, committees and other councils are involved with implementing and advising on CfE, including the Scottish Education Council, the Curriculum and Assessment Board, and the Strategic Board for Teacher Education (Table 3.1). Overall, these platforms for stakeholder engagement contribute to creating confusion and slow process around CfE. The OECD team interviewed representatives of key bodies and consulted their meeting minutes available online to understand how the various bodies, and especially the SEC and CAB, contribute to CfE implementation.

The SEC is the main forum for oversight of education improvement since 2017, which aims to provide strategic advice to ministers on education improvement; and lead and support collaboration between system leaders and key stakeholders to deliver education. The SEC links up with the CAB and the Strategic Board for Teacher Education and is informed by the International Council of Education Advisers.

The CAB is the main forum for oversight of curriculum and assessment activity in Scotland since 2017, which oversees and leads the curriculum and assessment policy framework in Scottish education and considers actions needed to ensure CfE delivers for all. It supports the SEC but is directly accountable to Scottish ministers. It replaced former CfE management groups and is chaired jointly by the Director of Learning, Scottish Government and the Chief Executive of Education Scotland. Members include teachers' professional associations, colleges, universities, scholars, parent associations, Skills Development Scotland and CLD representatives.

Both bodies were praised for opening a wider channel of communication between the Scottish Government and national agencies, and stakeholders. The CAB also successfully provided a few actionable inputs, including the drafting and publishing of the "refreshed CfE narrative" in 2019, following OECD recommendations (OECD, 2015[35]).

In terms of the bodies, committees and other councils mentioned above, their respective mandate and relationships to each other are defined, but clear processes to organise their interactions and the outcomes from the various groups' actions are amiss. The role of SEC as the overarching body was questioned during OECD interviews, contrasting the willingness to embody a partnership approach to education policy making and its ability to translate policy in practical terms, with a purported lack of innovative thinking and imbalance between its members (Humes, 2020[12]). Despite CAB's achievements, its members themselves acknowledged being uncertain about the roles and responsibilities of CAB in relation to other stakeholders and about their own role on the Board (OECD, 2020[1]). The communication between CAB and SEC was reportedly limited, with little time granted to discussing each other's input, and no clear sign of action following presentation of CAB papers to SEC, for instance (Scottish Education Council, 2017-19[41]).

Several reasons could be noted for the lack of clarity among Scottish stakeholders' responsibilities. First, sometimes the bodies, committees and institutions recently created to evolve with CfE policy took time to establish their role and find their voice in an already crowded system. The examples of the Curriculum Assessment Board and the Scottish Education Council highlighted above can in part be explained by the fact that both bodies were established in 2017, in replacement of – but with different mandates than – previous bodies, such as the Curriculum for Excellence Management Board and supporting structure. Furthermore, although Education Scotland was not restructured for CfE specifically, the development of its inspection and scrutiny functions, and of supporting leadership development and regional working in 2017, might contribute to the difficulties in identifying and fulfilling the institution's remit.

Second, instances were reported to the OECD team of organisations who took on responsibilities de facto because they had resources to respond to stakeholders' demands when they formulated them, even if such responsibilities might have been beyond their official mandate. Such shift is illustrated, for instance, in the fact that resources produced by the Scottish Qualifications Authority have remained the primary reference for teachers in upper-secondary education (Senior Phase), before resources produced by other bodies with statutory responsibility for curriculum support, such as local authorities and Education Scotland and predecessors.

As revealed by some practitioners, secondary schools tend to prioritise information and guidance on examinations coming from the SQA over other CfE-related guidance. The SQA produced detailed guidance as part of the development of updated qualifications (2012-16) when CfE was still in the early years of its implementation. The teaching profession was adjusting to its new role in curriculum design; the balance between schools' autonomy in curriculum design and central support and guidance was not yet found; national agencies had also developed a few resources to support curriculum design; and local authorities worked closely with their schools to offer them resources in support of CfE implementation. As a result, the offer of support resources varied across the system, often timely and useful but at times overwhelming and unclear to practitioners.

The challenge was especially significant in secondary schools, where the new CfE framework required learning to go beyond preparation for national qualifications. The teaching profession, seeking guidance to develop their curricula, turned to SQA's high-quality resources, which provide for each qualification a detailed course content, coursework, assessment structure and example of teaching resources in open share (see national qualifications pages in Scottish Qualifications Authority (2020-21[42])). SQA's resources tended to be used as primary coursework in classrooms instead of coursework designed at the school level based on the CfE framework. This expanded use of SQA resources contributed to reinforcing the influence of SQA's work, from providing teachers with optional assessment guidance to effectively replacing curriculum resources (OECD, 2020[1]).

A third reason why the distribution of responsibility is somewhat blurred is that most top administrative and executive positions in Scotland's education system tend to be held successively by a small number of agents. This tendency is shared with a number of other systems and is especially noticeable in Scotland due to the relatively small size of the education system. This rotation of high-ranking officials between positions in government, administration and agencies can help facilitate the dialogue between institutions and maintain a continuity sometimes necessary in public policy. It can, however, become an issue if this striving for dialogue and continuity cultivates a single perspective on education and prevents creative thinking and constructive challenging from within top decision-making processes (OECD, 2020[1]; Burns, Köster and Fuster, 2016[2]). Although this might contribute to inter-organisational relations, it has been raised in discussions with the OECD team as a risk. If only the same people are constantly involved, where do new ideas and perspectives come from?

Scotland's system is heavily governed relative to its scale and numbers of schools. The multiple layers of governance and additional responsibilities created around CfE can complicate implementation processes by generating additional policy priorities and supplementary materials with little co-ordination. The

overwhelming number of organisations also draws quite heavily on system leadership capacity, with staff often moving from one organisation to the next or from one division to the next.

Communication for a shared meaning of Curriculum for Excellence

Communication is an important channel to develop shared meaning between stakeholders and foster ownership of a policy. There is a wide range of tools for communication in curriculum policy implementation, from official publications on professional or public channels, to dialogue and consultation exercises, and informal discussions through all the initiatives for stakeholder involvement. Developing an effective communication strategy that brings all these tools together is a stepping-stone for engaging stakeholders and garnering support and clarity around the change.

Scotland succeeded in establishing the education language of CfE over time, which the OECD team could observe while interviewing stakeholders from all levels of the system. The key terms of CfE, from the four capacities to curriculum entitlements, learner progression, and Experiences and Outcomes ("Es and Os") seem to have made their way into daily discussions of education policy makers, teachers and learners alike. This ease with CfE language seems to owe in great part to teachers' discussions around curriculum design within their schools and with other units, with learners and their parents. Entry to the profession of teachers taught about CfE during initial teacher education (ITE) has also helped install CfE language in schools. It was also helped originally by the ongoing discussions at the national level and within professional organisations, as well as by the publication of some common documents, including the *Building the Curriculum* series, the "Refreshed curriculum narrative", and local authorities' own support documents for schools.

By establishing a specific language, Scotland set the conditions necessary for stakeholders to develop a shared understanding around CfE. Generally, the key terms of CfE seem well understood by the education community and are especially in use by teachers and learners in Broad General Education. The OECD team also noted a clear willingness in teachers' and schools' collaboration efforts to guarantee that their understanding of CfE terms, especially of CfE levels and benchmarks, were the same across the system. Practitioners mentioned several ways in which they communicated and collaborated with teachers and other experts, including schools' own initiatives, local authority and sometimes, RIC support, and organised professional networks. These types of collaborative structures help develop collective sense making and can further support curriculum implementation since they allow for discussion on the outcomes of the curriculum; create space for continuous feedback and knowledge sharing; reduce stakeholders' anxiety and facilitate the shared interpretation; and contribute to building curriculum coherence (Pietarinen, Pyhältö and Soini, 2017[43]).

Within a national framework, CfE allows for flexibility in school curricula, so it was pivotal in ensuring a shared understanding of the CfE vision and policy objectives, which seemed understood by the stakeholders, as reported to the OECD team. This is not an easy task, as evidence points to a number of instances where definitions and understandings differed within education systems. Stakeholders in education reform need a shared knowledge and understanding of the challenges they are seeking to address along with the meaning of the different facets or tools of reform (Kania and Kramer, 2011[44]; Penuel et al., 2011[45]). Even well-recognised key terms are not always understood in the same way. For instance, the Pupil Premium evaluation in the United Kingdom (England) noted that each school worked according to its own definition of educational disadvantage. Developing modalities for ensuring that policies are well understood and not taking for granted that understanding of phenomena and specific challenges will be the same across the system can help avoid problems in implementation processes (OECD, 2018[17]).

Effective policy implementation requires having shared values and a shared mission, as it can foster the collaborative processes essential for success (Huffman, 2003[46]; Innes and Booher, 2018[47]). In many

school systems, this may require a greater focus on long-term goals in school systems in order to meet the immediate challenges a reform may bring (Duckworth, Quinn and Seligman, 2009[48]). In addition, regardless of the level of decentralisation of a system, national leadership to "co-ordinate through partnership", by developing clear guidelines and goals and providing feedback on progress, remains very important to support stakeholders in implementation processes (Burns and Köster, 2016[49]).

One issue acknowledged by stakeholders is that communication around CfE has become confusing and unhelpful (OECD, 2020[1]). The documentation originally aimed to clarify CfE grew significantly, reaching what was sometimes referred to as "the 20 000 pages" of CfE. In part due to a willingness to support schools as they developed their curriculum, many entities, including government, national agencies and local authorities, published guidance and information about CfE until 2015, sometimes re-interpreting elements and creating possible confusion for teachers and learners (Scottish Government, 2019[50]). The constant production and recycling of documentation was often described as "overwhelming" by the practitioners it was designed to support, and as "confused" or "hard to find" by the parents and learners it was supposed to guide (OECD, 2020[1]). Surveying the documentation available on the websites of Education Scotland, the Scottish Government, local authorities and partners gave a similar impression to the OECD team. Sustaining effective and constructive communication is difficult, especially about a curriculum designed by schools, but it is possible to design and follow a communication strategy that helps implementation. The example of Wales' successful communication strategy around its new curriculum policy is enlightening (Box 3.4).

Box 3.4. An effective communication strategy around the Curriculum for Wales (United Kingdom)

The new Curriculum for Wales 2022 is the cornerstone of the country's efforts to pivot its education system from a performance-driven education with a narrow focus to an education led by commonly defined, learner-centred purposes. It is embedded in "Education in Wales: Our National Mission", a plan for 2017-21 that presents the national vision for education and calls for all children and young people to achieve the four purposes of the new curriculum.

Wales' success in mobilising all key education stakeholders for its reform agenda is due, at least in part, to the active communication strategy the Welsh Government and some of the middle tier actors have consistently adopted. The brand "Our National Mission" was developed, and associated terms such as "transformational curriculum" and "enabling objectives" have effectively brought coherence and clarity to the development of the education reform journey, laying a strong basis for stakeholders to make the mission their own.

The Directorate's communication strategy used a variety of channels online, on paper and live. The Minister held Question & Answer sessions, was consistently present at events, along with the Directorate, which was also active on social media, maintained a blog to help stakeholders keep up with the reform, and worked with designers to make the published content easier to read. A constant presence of key figures, such as the Minister and practitioners from all parts of Wales, also helped disseminate the message. Careful monitoring of discussions both on line and during events allowed the communication strategy to be adjusted, to clarify some issues with the curriculum policy, and debunk some of the myths through a variety of channels.

Source: OECD (2020[33]) *Achieving the New Curriculum for Wales*, https://doi.org/10.1787/4b483953-en.

In 2016, Education Scotland published a "Statement for practitioners" and took down much of the documentation then online on a different website, in an attempt to streamline the CfE framework (Education Scotland, 2016[51]). The effort continued with the "Refreshed curriculum narrative" published in 2019 by the

Scottish Government, intending to do away with the "technical jargon" that was not understood consistently. Stakeholders appreciated both efforts but remained cautious in reporting the effectiveness of clarity. For instance, the refreshed curriculum narrative was a welcome initiative, but it did not seem to address perceived ambiguities in the overall education mission and received little attention from stakeholders, given all the other policy documents.

Stakeholders qualified parts of the CfE language as "technical jargon" that had lost educational meaning and lent itself to interpretation. Often, the issue for effective communication is not in publishing long documents repeating the curriculum framework or developing each aspect separately. It is rather about going back to the meaning behind the words and guaranteeing that all stakeholders give the same meaning to key CfE words, such as "benchmarks" and "interdisciplinary learning". Although discussions about curriculum and policy should not turn into semantic debates, the choice of words is important. If in the future, the CfE framework were to evolve to respond to needs, collaboration with scholars and practitioners would be desirable at the time of designing communication. The absence of consensus on educational terms and underlying values concerning education would make systematic improvement of curriculum difficult (Benavot, 2011[52]). Continuous reference and integration of evidence as part of the dialogue between stakeholders during policy design and implementation can help to build a strong and informed consensus on the path forward. This is particularly vital in situations where stakeholders may have strong *a priori* beliefs tied to their identities and experiences (Burns and Köster, 2016[49]).

Conclusion

This chapter considered the stakeholder engagement needed to support and sustain the implementation of CfE. Stakeholder engagement is at the heart of Curriculum for Excellence. Significant efforts have been made to engage stakeholders throughout CfE's lifecycle, which have contributed to successes with CfE. The great degree of stakeholder involvement around CfE and the communication and development of a shared language created the conditions for shared ownership and wide support of CfE's vision. Stakeholders agree that schools and the profession should hold responsibility for conception, implementation and outcomes of their own curricula, provided the rest of the system fulfil their responsibilities to support schools and the profession within a clear policy framework through curriculum delivery and policy changes.

Several challenges inherent to stakeholder engagement around CfE were highlighted, however:

- First, there is a gap between the seemingly intense involvement of stakeholders at all levels of the system and the confidence they have in their effective influence on decision making. Decision makers should earn back and nurture stakeholders' trust so their engagement fulfils its potential for CfE implementation. Two aspects of stakeholder engagement around CfE seem to weaken this potential: the clarity of purpose of engagement initiatives and consistency in terms of using stakeholders' input.
- Second, CfE ownership was most often described as fragmented, with too many stakeholders claiming ownership of CfE while not necessarily fulfilling the responsibilities that come with such ownership. 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.
- Third, communication around CfE remains confused, which can hinder implementation by leaving CfE open to wide interpretations and overwhelm schools, learners and parents.

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4 Towards a coherent policy environment for Scotland's Curriculum for Excellence

This chapter analyses how the current policy environment in Scotland (United Kingdom) supports or hinders the implementation of its Curriculum for Excellence (CfE). Central to CfE's aspirations is teachers' capacity to be curriculum designers, and school leaders' ability to lead the curriculum process in schools. There has been significant progress in supporting this capacity, but this work has become more challenging for schools, given the need to respond to multiple new initiatives at local and national levels. This chapter explores the misalignment between CfE's aspirations and the system of qualifications, the need to get policies in place that deliver the right balance between curriculum autonomy and equity for students, and a need to align and perhaps simplify the many frameworks and strategies in the busy policy landscape. It concludes with recommendations that may pave the way to a more proactive and coherent policy environment.

The policy environment for curriculum implementation

The policy design and stakeholder engagement dimensions of the OECD Framework for Education Policy Implementation focus on issues in which policy makers have direct discretion and can act to facilitate curriculum implementation. Contextual or environmental factors, which condition stakeholders' agency and ability to implement reform, are equally important but sometimes difficult to adjust in the short term. Part of the policy maker's task is to consider them when designing the policy and when supporting the policy into implementation as they will greatly influence the change process.

Across many education systems, traditional understandings of successful policy implementation as fidelity to the goals and requirements of reform have required implementers of a policy to be recipients of policy decisions. Implementation was viewed as a straightforward technical process, and implementation "failures" in education were usually blamed on teachers and school leaders who were not doing what they were mandated to do by policy makers. Curriculum for Excellence (CfE), from the beginning, was a policy that implied significant shifts in the culture and structures of Scottish education to create a conducive policy environment to support a new vision of curriculum and of teachers as curriculum makers.

This chapter considers three major issues of the Scottish policy environment and the degree to which they support or hinder CfE. Significant progress has been made towards system leadership for CfE, leadership capacity for curriculum change and creating policies that enhance CfE. Some issues remain, however, including those related to policy coherence around CfE, particularly regarding assessment and evaluation, and system governance.

Flexibility management: The challenge for teachers and school leaders

The success of curriculum innovations such as CfE, which require more of teachers than fidelity to centrally prescribed programmes of study, relies heavily on the capacity, culture and status of the teaching profession and the quality of school leadership (Gouëdard et al., 2020[1]). Systems that promote such local innovation and strive for the empowerment of system actors – including learners – require strong system leaders to drive a culture that is empowered and accountable, and who can present a compelling case for the education system to the media, politicians and the general public.

The flexibility and autonomy afforded to teachers and schools by CfE are highly valued by the teaching profession, and appreciated by parents and other stakeholders. In turn, most stakeholders interviewed by the OECD team saw teachers as highly qualified professionals able to realise CfE's ambitions and agreed that significant progress had been made towards CfE implementation. There was positive feedback on the professional support provided to date to teachers and school leaders in support of CfE. Stakeholders endorsed the commitment in CfE to meet the needs of learners and the flexibility afforded to schools to respond to local needs and personalise their curriculum for learners. The OECD team also observed how leaders and schools used curriculum flexibility to deliver creative responses to the challenges posed by rural and island locations, in areas of dispersed populations and in small schools, through the use of consortia of schools and technology to support the principle of curriculum breadth for students (OECD, 2020[2]).

However, CfE flexibility can also be a double-edged sword: flexibility inevitably gives rise to variation, and in discussions, the degree of variation in how CfE was experienced by learners across Scotland (United Kingdom) was a concern. For system-level leaders, this concern was about a variation in quality across the school system. The OECD project on Education 2030 shows that many systems depend on local leadership for the design of curriculum at the school level to meet the needs of learners and support this flexibility with an appropriately robust evaluation framework (OECD, 2020[3]). For others who

expressed concern about variability, the issue was the degree of variability in how the curriculum was organised, and consequences for student outcomes, and, importantly, system equity.

New research conducted with headteachers in Scotland as part of a Nuffield project highlights the degree of variation in how the curriculum is structured for students in secondary schools, for example. The research found that 82% of schools organise this phase of schooling as a 3+3 model (three years of Broad General Education [BGE] followed by three years of Senior Phase) as envisaged by CfE. But 18%, including all the independent schools in the sample, maintain the old 2+2+2 model (previous curriculum model divided into two-year periods) (Shapira et al., 2021[4]).

The same study found considerable differences in the year of schooling when students make their first subject choice. In the sample of headteachers, 14% reported that this happened in S1, 51% in S2 and 34% in S3. Clearly, the implementation of CfE in the secondary phase remains a work in progress, with schools moving at different rates away from what was. However, given the well-documented relationship between subject choice and educational outcomes in secondary schools, variation of this scale would be a cause for concern in any system. For Scotland, it is particularly worrying given the importance of subject choice in determining entry to higher education (HE). A study comparing differences in entry to HE in Ireland and Scotland showed that inequalities in entry to HE were explained by subject choice in Scotland, whereas in Ireland (where students take fewer subjects), they are more closely associated with academic performance (Iannelli, Smyth and Klein, 2015[5]). These particular variations are associated with some of the assessment and qualifications issues identified in the review. However, they are also a reminder that when schools exercise their much-valued "flexibility to meet the needs of students", it may not always work in the interests of their students in the longer term, nor may it serve system goals towards equity.

A further challenge arising from the flexibility that is at the heart of CfE is the level of demand on teachers as curriculum makers in their own schools. It was clear to the OECD team that the teaching profession greatly valued this role; teachers saw themselves as active participants in the curriculum process, and they saw their work as reaching well beyond the technical delivery of the centrally prescribed curriculum. However, there is an obvious mismatch in the Scottish system between the curriculum-making role of teachers and the comparatively high class contact hours of teachers across the system. As noted in Chapter 1, teaching time has evolved in Scotland between 2000 and 2019: it dropped by 95 hours at pre-primary and primary levels, as part of a teachers' agreement that introduced the 35-hour working week, resulting in a maximum of 22.5 hours of teaching per week for primary, secondary and special education teachers. Even with this decrease in net contact time, the maximum time that teachers at these levels can be required to teach is still longer than the OECD average (OECD, 2019[6]). The sustainability of this above-average allocation, together with the expectations that teachers engage in local curriculum development that in turn delivers the CfE ambitions for all learners, is an open question.

In discussions with school leaders and teachers about how decisions about curriculum are made at the school level, the needs of the students and the competence of teachers and school leadership were always referenced. But they also identified other factors. Finding time for teachers to plan collaboratively and to work together on moderation was mentioned as a challenge. The role of local authorities in setting priorities for schools and the potentially constraining roles of locally mandated approaches and initiatives were identified as significant factors for school-level curriculum planning and innovation. On the other hand, the scale and type of support for professional learning in schools, whether this was provided by a local authority or Education Scotland, was identified as positive support for local empowerment. The OECD team heard many positive examples of this taking place across Scotland.

Similar contrasting views of the Regional Improvement Collaboratives (RICs) were also expressed. For some school leaders, these were seen as an additional layer of "the hierarchy", "another initiative to deal with", or "some other group to report to". Others took a more positive view, seeing them as an important support for local empowerment, an "important platform to share good practice", and potentially a "successful meso-system" to support CfE work in schools (OECD, 2020[2]).

Other contextual factors may limit teachers and school leaders. Recent research about the implementation of health and well-being in CfE points to constraints experienced by teachers, for example, especially those working in schools serving high poverty communities (Hardley, Gray and McQuillan, 2020[7]). For teachers at the secondary level, the biggest constraint appears to be the spectre of qualifications (see discussion below). In common with other education systems, concern for the well-being of children and young people in society has led to new pressures and expectations for schools (OECD, 2018[8]). Recognition that students who feel well learn well is widely shared and schools have an important role, not just in responding to the well-being concerns of society but in actively promoting and supporting student well-being. In discussions with the OECD team, it was evident that education stakeholders, system leaders, school leaders, teachers and learners placed a high priority on well-being and saw the flexibility of CfE as central to school efforts to support and enhance it. This was particularly strong in primary education, where the focus on student well-being was shared by the children who met the OECD team. CfE affords schools the flexibility to focus on and promote well-being, but in some discussions, school-level actors noted that the complexity of some well-being issues – such as anxiety and other mental health concerns – were often beyond the capacity of schools to respond. This was even more evident during the coronavirus (COVID-19) pandemic.

While well-being and the challenges of supporting the well-being of adolescents did feature in discussions with students, teachers and school leaders of post-primary schools, these discussions were more likely to move quickly to matters of qualifications, subject choice, and transition to the Senior Phase. The OECD team was struck by the absence of any explicit references to CfE from many of the discussions with post-primary leaders, with the notable exception of the four capacities, which were consistently mentioned as overarching aspirations for schools. It was equally notable that “successful learners” was given the highest priority of the four capacities.

Thus the autonomy promoted by CfE depends not only on the capacity of the teachers and school leaders to respond to that autonomy with expertise in curriculum design. It also depends on the interaction between individual actors and institutions, and on local and other pressures placed on schools by the policy context and environment, the social and cultural context of the school and the wider societal well-being of children and young people. The autonomy of schools when it comes to CfE is affected by the external context; those constraints are not the same for all schools or sectors of the system.

Moderating and making sense of that policy context and environment for schools, managing constraints, and protecting that autonomy is part of the work of school leadership in the Scottish system. Scotland has prioritised the support and development of school leadership as a policy goal, and the OECD team had discussions with some outstanding school leaders who are exercising this autonomy. It was notable in those discussions that school leaders see their role as interpreting the policy context for their school to ensure that the school and the teachers are protected from policy incoherence and overload. Leaders see themselves as filtering what was relevant and appropriate for the school from the proliferation of policy initiatives at the local and national levels. Of note, in complex education systems, this has become a key role of school leadership (Pont, 2020[9]). School leaders appear to have strong local networks, particularly across local authorities and are committed to the communities and regions where they work.

The agency and empowerment of teachers to make decisions in the interests of the children and young people in their classrooms are highly valued in Scotland. An evaluation of the implementation of the recommendations of a review of teacher education in 2010 found evidence of progress in four areas. It found that teachers were more engaged with professional learning and had a greater sense of ownership of their own career-long professional learning. There was a greater focus on the impact of teacher professional learning on students with consideration of the needs of students informing decisions on professional learning. Notably for CfE implementation, it concluded that there had been a cultural shift towards more professional dialogue at the school level, and it found that there was a greater willingness than previously to try new teaching practices (Black et al., 2016[10]).

Interestingly, this evaluation identified two particular challenges for teacher professional learning. The first was the practical one of securing replacements for classes when teachers attend professional learning events. The second was the array of "competing national priorities" that colonised teacher professional learning. Prior analysis of the meaning of teacher leadership in the Scottish model for professional learning raised the issue that trying to pursue different and sometimes competing political agendas contributed to confusion in the conceptual underpinnings of initiatives to promote teachers as educational leaders (Torrance and Humes, 2014[11]). This "competition" was consistently raised with the OECD team as impacting teacher and leader agency at the school level. Managing those competing demands continues to drain the energy and capacity of teachers and school leaders. The OECD team was struck by how often school leaders described the gatekeeping and management of competing demands – as one memorably said, "the need to protect my staff" – as central to their role (OECD, 2020[2]). Freeing up some of that capacity to provide more leadership for and in schools, particularly to support CfE across all sectors of the school system, should be an important priority.

A promise to align assessment and qualifications to Curriculum for Excellence

Building the Curriculum 5, from the series of CfE documents, proposed a comprehensive framework for ages 3 to 18 years for assessment across the education system as part of CfE (Scottish Government, 2011[12]). This representation of the framework has been accessed by systems and researchers worldwide as an exemplar of an assessment framework with a clear focus on the centrality of the learner and an articulation of the different purposes of assessment – again prioritising the focus on student learning. The role of teachers in the assessment process is notable in the framework. The document also stresses the need for a programme of continuous professional development (CPD) to support teachers' assessment capacity to assess with confidence and consistency. The document acknowledges the importance of qualifications in the Senior Phase but notes that the "next generation of qualifications within CfE" will build on the same curriculum priorities and serve the four capacities of CfE. The importance of transitions in that context is also stressed – transition from BGE, and transition to further and higher education. The framework promises much in support of CfE; there is a strong alignment of principles and focus. Arguably, however, the promise has yet to be delivered.

Building the Curriculum 5 is not a single document but a set of documents that provide additional guidance on different aspects of the framework – reporting, standards, recognising achievement, and quality assurance and moderation. An analysis of these documents shows that their focus is on the BGE rather than on the Senior Phase and that the guidance is at a high level, with considerable local autonomy proposed (in line with other aspects of CfE).

In the decade since the publication of the assessment framework and supporting guidance, one of the most notable successes has been the realisation of that commitment to the professionalism and agency of teachers in the assessment process. The National Improvement Framework (NIF) sustained that commitment; assessment is one of the improvement drivers, but the judgement of teachers is identified as central to that process. The new census-based standardised assessments (Scottish National Standardised Assessments [SNSA]) are presented as low-stakes to provide teachers with diagnostic information on children's literacy and numeracy to support teachers' assessment and plan for effective teaching. In avoiding the pitfalls of high-stakes testing in the school system, Scotland has positioned teacher's professional assessment work as pivotal for the quality of student learning. The controversies around the P1 assessments (reviewed following their first round of implementation) focused on the appropriateness of assessments of this kind for children in P1, how the data might be used at the national level and notably, the suitability of assessments of this kind for the play-based curriculum advocated by CfE for this stage of learning.

As the SNSA continues to be rolled out, Scotland now has a well-developed and widely shared view of the centrality of teachers in the assessment process. The agency of teachers in assessment and the focus on providing teachers with tools (including census-based assessments) to support their judgement is a particular strength of the system, and one that is internationally regarded. The development of teacher assessment literacy through CPD and a new focus on assessment in teacher education programmes has resulted in greater confidence in teachers in their own assessment practice. That level of professionalism was striking in discussions with teachers (OECD, 2020[2]). The review of the P1 assessments also noted that the majority of teachers felt prepared to use the data and found the training useful, even if they were less positive about the quality or usefulness of the assessment data presented to them (Reedy, 2019[13]).

Within BGE, there is an explicit attempt to align curriculum and assessment through the use of levels and, since 2016, the benchmarks to support teacher judgement. Originally called "CfE benchmarks", these are now widely referred to as simply the "benchmarks" and are described as the articulation of the national standards for each level (OECD, 2020[2]). While the addition to the benchmarks was broadly welcomed in the system, they pose both curriculum and assessment challenges. As a tool to support teacher judgement, the benchmarks may be useful; however, despite explicit instructions to teachers and schools not to use them in this way, there is a real risk that they become the proxy curriculum – a checklist of content to be covered to meet the expectations of a particular level.

While the CfE levels and benchmarks are described as tools to support planning for learning and guides for teacher judgement, they are also the basis on which achievement is to be reported nationally; thus, the reports on the NIF, for example, reference aggregated data on the percentage of students achieving each level as reported by schools. While this data is interesting, reporting it on a national scale and tracking small changes in percentages as evidence of improvement or otherwise may not be giving the system the robust data needed to monitor student achievement. Some observed that the practice of reporting on levels might be giving rise to an impression of a rather static system or one that is at best inert, and at worst, not improving.

There is general confusion, confirmed by the stakeholders interviewed by the OECD team, as to what data counts when it comes to student learning. Given CfE's focus on the four capacities, the absence of data on how well students are achieving in three of these – the capacities beyond "successful learner", which are harder to assess – is also noteworthy. The OECD team received much anecdotal evidence about how CfE appears to support and develop the four capacities during interviews with learners, their parents, teachers and system leaders (OECD, 2020[2]). Beyond its own observations and examples in validated school self-evaluation reports, the OECD team observed no systematic evaluation data to support a judgement as to whether the aspirations articulated in the four capacities 20 years ago are being realised.

The OECD team was struck by the contestation around data on student learning more generally and by the absence of robust, authoritative longitudinal data (outside the data collected on qualifications) to inform decision making at the system level and to inform wider society, communities and parents about the outcomes of CfE. The public in Scotland has access to lots of data about the education system, including details on the numbers of students attaining CfE levels and qualifications at each level of the framework of qualifications, as well as NIF evidence and case studies of school improvement. This commitment to data transparency at every level of the system is good practice but is not matched by the quality of the data available. More robust and better quality data on student achievement over time in Scotland would better support public debate and political decision making in the future. It would also be a better reflection of the high priority given to education by the Scottish Government, the media and the public.

Robust system-level data are needed on how well children are learning and progressing, in order to support the implementation of CfE and inform curriculum reviews and developments at system and school level. Scotland needs a single source of truth (SSOT) approach to student achievement; SSOT approaches ensure that in any system or organisation decisions are made based on the same evidence and data. A step towards this would greatly enhance the system's overall stability, and support measured responses

to external system data such as the Programme for International Student Assessment (PISA), which only provide a picture of performance for 15-year-olds, not capturing those in the Senior Phase.

While the four capacities remain the stated goals of CfE, as noted, three of them remain comparatively under-evaluated relative to "successful learner". What does progress towards the other three capacities look like at each level, or even in each phase? How can Scotland know that CfE is delivering on its ambitions for Scotland's children and young people? As part of a re-assessment of the original vision of CfE, some work might be undertaken to develop some specific and contemporary success indicators or a matrix of success for each of the four capacities that might be tailored for multiple audiences, including learners. Using this matrix as the basis for other research and evaluation measures would give coherence and focus to data collected on the impact and effectiveness of CfE.

The NIF contains data that aims to measure progress of the system at the national level. The framework and its data do not appear yet to be well supported across Scotland as providing a full picture of education system performance, or on its progress or full breath of the richness of CfE. The absence of robust data on learning outcomes and progression on the four capacities leaves the system vulnerable to reliance only on international assessments for system intelligence. Participation in these kinds of international assessments, such as PISA, should complement data collected and reported regularly at the national level. Of note, the absence of this kind of data to support decision making in the attainment challenge has also been recently documented (Kintrea, 2020[14]).

The Scottish Qualifications Authority (SQA), in collaboration with stakeholders, designed new national qualifications to align them with CfE and to certify learners' achievement in developing the four capacities as well as the skills for learning, life and work. The new National Courses and qualifications aimed to provide high standards and a formal acknowledgement of learners' achievements while ensuring at the same time continuity with the breadth and depth of learning sought at earlier levels of CfE. The qualifications were first introduced in 2013/14, then revised in 2016/17. In line with efforts to adopt a broader definition of educational success, the availability of vocational qualifications and the Foundation Apprenticeships emerging from the Developing the Young Workforce: Scotland's Youth Employment Strategy (DYW) are also an important development and appear to be widely welcomed by stakeholders even if implementation is at an early stage (Scottish Government, 2021[15]).

It would seem the ambition for reformed national qualifications to align with CfE has not been fully delivered to date, despite the early commitment in *Building the Curriculum 5* and the work of aligning National 4 with Level 4 of the curriculum. One of the clearest indicators of a misaligned assessment and evaluation system is when stakeholders say, "We don't want to do this but the examination/test process makes us do it." The OECD team heard this many times in the course of discussions of CfE, especially with stakeholders from the secondary system (OECD, 2020[2]). There may well be historical reasons why the qualifications did not develop as originally planned as part of a unified 3 to 18 curriculum, but the current two-stage secondary phase that has evolved is now the most significant barrier to implementing CfE for learners in secondary school. Indeed, the backwash from the misalignment in the secondary stage may even be felt in primary schools, as concerns about readiness for subject choice and examination success were mentioned by primary school parents and school leaders (OECD, 2020[2]) (see also Chapter 2).

The disconnect between the qualifications in the Senior Phase and CfE's philosophy hinder the relevance of the first and the power of the second. Many stakeholders interviewed expressed doubts as to how well the public understands the greater diversity in qualifications now available in schools. Notably, the OECD team was struck by the absence of any reference to National 4 and National 5 in discussions on assessment and qualification in the Senior Phase. Stakeholders agreed, on the other hand, that there remains one accepted and widely understood measure of success in the Senior Phase – the attainment of five Higher qualifications. The OECD team noted that in discussions on the Senior Phase, and much of secondary education, the four capacities are displaced by the five Highers as the purpose of the curriculum at this stage. Notably, learners, particularly those who had attained their Highers and are now working

towards Advanced Highers, commented that they had set aside any aspirations towards the four capacities to undertake the "two-term dash" for their Higher qualification and the rote learning needed to attain these qualifications. Learners spoke positively about accessing vocational qualifications as part of their Higher experience. Interestingly given concerns about curriculum breadth in CfE, learners saw these vocational options as giving them a broader experience (OECD, 2020[2]).

The final stage of secondary education poses some complex policy challenges. A recent review commissioned to support reform in that phase of education in Ireland examined trends across nine jurisdictions (O'Donnell, 2018[16]). While there were some common features identified – explicit attempts to integrate vocational studies into what have been traditional academic tracks, for example – the differences between systems at this stage are striking, reflecting national priorities for education and economic and social development, among other contextual factors. Because this phase is the "frontier" that leads to economic, civic and social agency for learners, it is subject to the greatest level of public and media interest. This interest focuses in particular on the assessment arrangements for this, the final stage of schooling.

Designing an assessment system that can serve the multiple purposes of qualifications at this stage is challenging and generally involves trade-offs between purposes. Not all can be given the same priority. But qualification arrangements should at least not actively undermine the aims and purposes of the wider system (OECD, 2013[17]). Is this happening in Scotland? The OECD heard mixed views on this. While, on the one hand, there is general acceptance that there is more work needed to better align qualifications in the Senior Phase, there was little appetite for more reform. The impact of COVID-19 on examinations across Europe has given new impetus to the reform of traditional end-of-school examinations. The pen and paper format has come under some scrutiny, but so too has the degree to which they prepare learners for the uncertainties and challenges ahead. Scotland's early decision not to proceed with the Highers and Advanced Highers in 2021 and to rely instead on teacher judgement of evidence of learner attainment as the basis for these high-stakes awards will be important in informing next steps for these awards towards better alignment with CfE (Priestley et al., 2020[18]). For many developed school systems, the vulnerability of traditional examinations, and the degree to which systems had to mobilise teacher judgement to support graduation from school and transition to further or higher education, has re-shaped debates about the future of high-stakes assessment.

In a recent address marking the tenth anniversary of his review of teacher education, Graham Donaldson suggested that the last decade in Scotland had seen increasing confusion about the role of assessment in student learning. He suggested that Scotland now had a "confused set of practices" (Donaldson, 2021[19]). The OECD team would extend that analysis to include a somewhat confused set of policies, with some distance to travel to deliver on the promise of the integrated framework proposed in *Building the Curriculum 5*.

Many systems include school evaluation processes in their assessment and evaluation framework, thus connecting the quality of schools with the quality of children's learning and achievements. The approach to inspection of education in Scotland had a long history of innovating with and for schools, particularly in supporting school self-evaluation. While the responsibilities for inspection of education is not the focus of this OECD review, the team was struck by 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. The unusual configuration of an inspectorate of education as part of an organisation that is also responsible for supporting school leaders, curriculum design and support, teacher professional learning and a range of other initiatives is noteworthy, particularly in a system where the autonomy of schools in curriculum making and in planning for teaching and learning is so highly valued. Across countries, school evaluation and inspection systems are important means of managing the tensions between local flexibility and national consistency. In recent years, many systems have moved to more decentralised models of inspections, including school self-evaluation and the development of self-evaluating networks of schools (in particular, local authorities, for example).

From competing priorities to a more coherent policy ecosystem for Curriculum for Excellence

The design of CfE as a framework for learners from the ages of 3 to 18 years was innovative for Scotland and visionary for the international community when it emerged in the early 2000s. Almost 20 years later, CfE is still remarkably relevant to Scotland's aspirations for a high-quality, future-oriented education for all its children and young people. The implementation of CfE across schools since its launch depended not only on dedicated support from teachers, leaders and the wider education community. For CfE to be implemented effectively, other policies and structures of the school system needed to evolve alongside to ensure that CfE was not a moment-in-time initiative but a reform that would be embedded and sustained. Scotland has made significant progress towards this kind of policy coherence for CfE. But more work remains.

Among the most notable efforts towards coherence was the positioning of CfE as one of the three supporting pillars of the education system alongside Getting it right for every child (GIRFEC, 2006) and Developing the Young Workforce: Scotland's Youth Employment Strategy (2014). The three pillars of support present as a significant and coherent structure – a pillar for what and how children learn (CfE), a pillar to support children's well-being (GIRFEC) and a pillar to support children and young people into meaningful work (DYW).

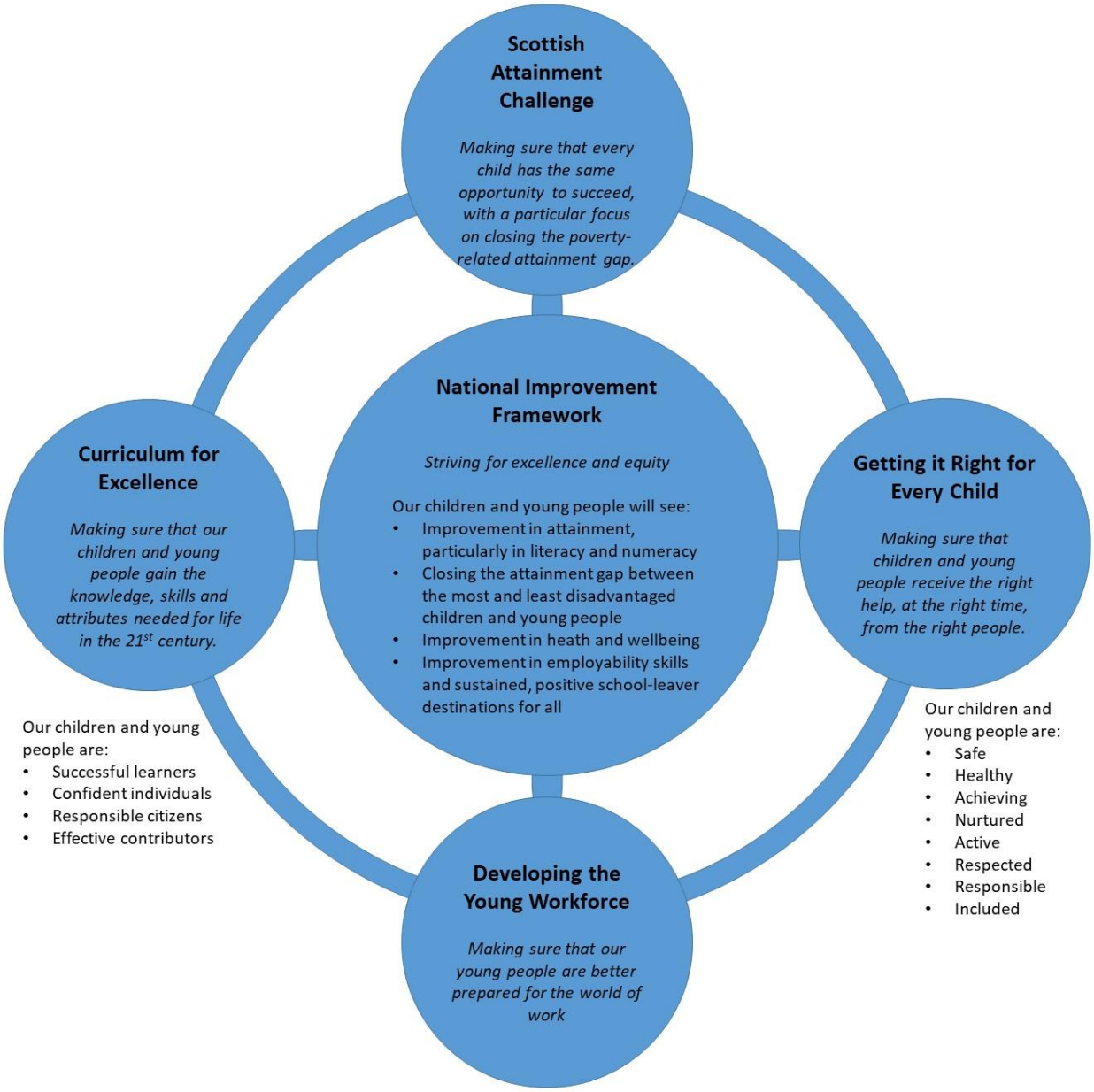
The absence of policy coherence is fragmentation. In fragmented systems, potentially high-impact reforms are launched, but within a relatively short period of time, they are invisible in schools and classrooms as teachers and school leaders have learnt that this "game-changing" initiative will be followed by another one soon. Although Scotland's is not a fragmented system, the OECD analysis identified two particular challenges for the coherence of CfE.

Discussions with the OECD team identified some initial attempts to support CfE that have, over time, become barriers to implementation. The policy space between the three pillars of Scottish education (DYF, GIRFEC, CfE) has become crowded with new policies in recent years. Additional policies and initiatives have been introduced, such as the Scottish Attainment Challenge in 2015 and the Joint Agreement on an Empowered System in 2019. The emergence of the Regional Improvement Collaboratives as part of the education policy landscape since 2015 is also noteworthy.

A recent report of Scotland's International Council of Education Advisors also noted the efforts made to balance and integrate CfE and NIF without one being eclipsed by the other (Scottish Government, 2021[15]). While this is sage advice, it also points to the challenge faced by school leaders who have to balance the competing demands of two pillars, both ostensibly sharing the same purposes. The 2021 National Improvement Framework and Improvement Plan offers a new policy map of the system with the pillars replaced by "strategic frameworks", with five of these identified in Figure 4.1 (Scottish Government, 2020[20]). The figure places the NIF as the central framework, the others as support.

A further – and different – "map" of the policy environment was offered to the system early in 2021, when Education Scotland published guidance on the empowered system (Education Scotland, 2021[21]). This is not mentioned in the up-to-date NIF policy map. An empowered system, according to the guidance, is where learners, teachers and leaders exercise and take initiative within and beyond the classroom in support of improved outcomes for learners. The empowered system is presented as an eight-piece jigsaw with separate guidance documents for each partner in the jigsaw to reflect on empowerment in their own context.

Figure 4.1. Relationship between the National Improvement Framework and the other strategic frameworks in Scottish education, 2021



Source: Scottish Government (2020[20]), *Achieving Excellence and Equity - 2021 National Improvement Framework and Improvement Plan*, https://tinyurl.com/kf3xtp49 [accessed on 21 April 2021].

For school leaders, teachers and the general public, these moving maps of the policy landscape and the emergence of new or revised initiatives and priorities generate a continuum of perception (OECD, 2020[2]). At one end of this continuum is a dynamic and responsive system focused steadfastly on student learning and improvement; at the other, it can be driven by political or media criticism. The challenge of policy coherence and of locating the system on that continuum is not confined to Scotland. Education systems may suffer from "initiative overload" as rapid social, technological and economic changes place increasing pressures on schooling. In countries like Scotland, where there is strong public confidence and interest in education, these pressures can be particularly acute.

The OECD team heard a number of system stakeholders, including policy makers, researchers, teachers, school leaders, and parents, refer to increasing media hostility towards education in Scotland. For some schools, this resulted in moves towards conservatism in decision making to minimise the risk of any controversy. For leaders, it gave rise to a constant concern as to how an action or lack of action might be perceived by the media and, increasingly, on social media platforms. This is not a uniquely Scottish experience but added to the political priority placed on education, it makes for a high-pressure and sometimes hyperactive system, where the policies and initiatives may well be ambitious and well-constructed policies in themselves, but how they work as a policy system may not be immediately evident.

System governance and the policy cycle

Traditionally, Scotland has seen its education system as a source of national pride and granted great importance to educational issues in the political debate to a degree that would be the envy of many a system. This pride has contributed to the broad commitment to CfE and to Scotland's evident ongoing commitment to improving education in general. The importance afforded to education is also notable in the appreciation that system leaders and stakeholders show for their own role in education, and in the constructive approach that most actors adopt within the numerous governance boards, committees and other advisory groups. The high priority given to education is also reflected in the degree of political debate about education and the positioning of education as a key priority not just for the Learning Directorate but for all of the Scottish Government. The issue of unclear CfE ownership and responsibilities raised in Chapter 3 can aggravate the effect that the political debate has on CfE, meaning that contestation about CfE becomes inevitably political and urgent. There is pressure on senior leaders to react quickly to issues and debates.

As a consequence, Scotland's CfE exists within a busy policy landscape; the volume of documentation, policies and reviews is high and can sometimes be associated with policy overload. The OECD team was struck by the volume of guidance (and subsequent clarifications and additional guidance) that streamed from Education Scotland in particular. At one level, this is understandable given the extensive remit of Education Scotland. However, it may also be indicative of a system in constant reactive mode. The OECD team noted the absence of a policy review cycle – an identified timeline within which issues or concerns about aspects of CfE would be addressed in a process of systematic and scheduled review – which has proven valuable in similar education systems, although it is not present in many.

Such a systematic approach can also ensure that curriculum issues and controversies can be raised but then flagged for inclusion in the next review rather than requiring immediate, and often political, intervention. Recent work by the OECD looking at how different systems manage curriculum decision making showed that managing the momentum of this process can be challenging. Table 4.1 summarises some of the challenges highlighted by these systems and the strategies they use to tackle them. A key challenge is to identify a timeframe that is effective for the aspirations and structure of the system. Some countries have found that a ten-year timeframe may give system stability but at the expense of responsiveness. Others, that a process of rolling review can allow for an agile response as issues arise, but in turn generates constant change and updating. For systems that value consensus on curriculum, the time it takes to build consensus can delay much-needed reform (OECD, 2020[2]).

Table 4.1. Challenges and strategies related to decision-making time lag in curriculum review

	Challenge/strategy	Countries/jurisdictions reporting the challenge/strategy
Challenges	Difficulty in building consensus on the direction of curriculum change	Argentina, Denmark, Korea, Viet Nam
	Delays resulting from the time requirement of a rigorous review process	Ontario (Canada), Estonia
	Limited responsiveness of periodic curriculum renewal cycles	Brazil,[1] Hungary, India,[1] Japan
Strategies	Engaging stakeholders in developing shared understanding and ownership of curriculum change	British Columbia (Canada), Ontario (Canada), Costa Rica, Ireland, Netherlands, Poland, Sweden, Scotland (United Kingdom)
	Setting out a vision for the future of education to guide curriculum changes over time	British Columbia (Canada), Ontario (Canada), Norway, Portugal, Russian Federation, Singapore
	Engaging in ad hoc, partial or continuous reform	Québec (Canada), Denmark, Hong Kong (China), Ireland, Mexico, Netherlands, New Zealand, Poland, Portugal, Sweden, Turkey, United States,[1] Northern Ireland (United Kingdom), Scotland (United Kingdom)
	Articulating key curriculum concepts that endure over time	Australia, Brazil,[1] British Columbia (Canada), Québec (Canada), India,[1] Ireland, Japan, Kazakhstan, Korea, Norway, Russian Federation, Singapore, Turkey, Viet Nam
	Creating space in the curriculum to accommodate new changes	Australia, Brazil,[1] Québec (Canada), Saskatchewan (Canada), Czech Republic, Japan, New Zealand, Norway
	Using "learning to learn" as the centre of curriculum reform decisions	Finland, Hong Kong (China), India,[1] New Zealand, Portugal
	Assessing the relevance of current curricular content through systemic reviews	Ontario (Canada), Mexico, New Zealand, Norway
	Digitalising the curriculum to facilitate faster change	Australia, Ontario (Canada), Denmark, Hong Kong (China), New Zealand, Norway

Note: 1. Responses for these countries were submitted by independent researchers, not government administrations.
Source: OECD (2020[3]), *What Students Learn Matters: Towards a 21st Century Curriculum*, https://doi.org/10.1787/d86d4d9a-en.

Scotland has not decided how or when it will conduct reviews; to date, including this one, reviews have been in response to a controversy rather than planned and proactive, and they have drawn on expertise external to the system.

While external perspectives can be useful from time to time, building internal system capacity for curriculum review, and trust and confidence in that capacity should now be prioritised for Scotland. A cycle of this kind requires three essential supports. First, it needs a systematic approach to data collection on the impact of the curriculum, as discussed earlier. Second, it needs access to independent research on an ongoing basis. And third, responsibility for the cycle of review needs to assigned to an agency accountable to government and wider stakeholders that acts as owner and champion for CfE and where accountability for its quality and sustainability rests. Ironically, in Scotland's system of many layers of agencies and organisations, this is a current gap.

Conclusion

This chapter considered the policy environment needed to support and sustain the implementation of CfE; not just the kinds of policies needed to enable effective implementation, but the alignment between them that can give teachers and school leaders the agency to design the learning experiences promised for Scotland's children and young people by CfE 20 years ago. The originality of CfE at the time of its development and its continued relevance and influence on the international stage continues to influence international curriculum policy; affording autonomy at the school level within a national framework is now widely used as a curriculum design principle (OECD, 2020[2]). Other systems share the implementation challenges of these approaches.

This chapter identifies four challenges for Scotland in ensuring that the policy environment is conducive to the aspirations and implementation of CfE. The capacity of teachers and school leaders to be curriculum makers at the school level has developed since CfE was introduced, supported by a range of CPD and support materials. The review found that the capacity of teachers and school leaders and elements of system leadership were being constrained by multiple initiatives in a busy local and national policy environment. The promise of assessment aligned with CfE has not been fully realised, and the OECD is further supporting Scotland in this area via dedicated working paper options for Scotland to move forward with assessment and qualifications (Stobart, forthcoming[22]). This gap is the most significant barrier to implementation in the secondary education level, with the backwash from qualifications in the Senior Phase shaping the experience of learners more than the aspirations of CfE. This alignment challenge extends beyond assessment. While the policy environment is crowded with multiple initiatives, gaps and misalignments remain – such as that in assessment, for example – and where new policies are introduced (or old ones revisited), alignment and coherence is an issue. Another gap in the policy environment is an established systematic review cycle for CfE supported by robust data and evidence.

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5 Considerations for the future of Scotland's Curriculum for Excellence

This chapter reviews the implementation of Curriculum for Excellence (CfE) and provides concrete recommendations for Scotland (United Kingdom) to consider taking on board following ten years of experience with the implementation of CfE in schools. It suggests that the next steps for CfE need to focus on students and their learning progress. This implies reviewing how CfE is consistently providing learning opportunities through the Senior Phase; clarifying ownership of CfE and regularity in responsibilities and communication; defining a stable institutionalised curriculum review process and an aligned assessment system; and gathering consistent data to monitor progress.

The active developments of the Scottish education system, its structure and performance, and the unexpected impacts of the coronavirus (COVID-19) pandemic on society, the economy and education, provide a dynamic background to this OECD review.

While Scotland's results in the Programme for International Student Assessment (PISA) followed the OECD country averages and declined between 2009 and 2015, they remained stable between 2015 and 2018. New evidence from PISA 2018 showed Scottish students were among the top performers in central 21st century abilities, including their capacity to engage with people from different cultures, and to act for collective well-being and sustainable development. Students from disadvantaged backgrounds significantly improved their performance. Attainment and positive destinations of school leavers and other indicators linked to Curriculum for Excellence (CfE) also progressed in recent years.

Students are engaged in learning through Curriculum for Excellence, which started rolling out in schools in 2010. CfE aims to provide a holistic approach to learning, to develop knowledge, skills and attitudes. Based on a common framework, schools and their teachers have the responsibility to design their own curriculum. The government introduced a range of policies and strategies to support schools, teachers, and the education system with CfE, and to drive system performance to higher levels. Ten years after its first implementation across schools, a range of issues have become apparent.

How do students experience CfE and their learning as they progress through the system? The analysis undertaken for this assessment reflects on how CfE has delivered and can continue to deliver the best possible learning experience to prepare students for their future by looking at CfE and its change approach. To understand the implementation of CfE, this chapter explores the approach to implementation and how it has combined different dimensions to drive change across the system. Based on the questions below, the chapter provides a set of recommendations for action in the next stages.

- How has CfE been implemented from a student perspective? Is the CfE design working well for all students as they progress through the system?
- How have those shaping CfE been involved, and how can they engage most productively to continue delivering the best possible CfE?
- How has the policy environment contributed to CfE reaching all schools consistently?
- Has there been a clear and well-structured implementation strategy to review progress and plan the next steps?

An overview of the implementation approach

An implementation strategy refers to the co-ordinated actions taken following an initial decision on the design of a policy for it to become a reality. The policy itself may be defined in a document that provides an overarching vision and outlines the main components. The implementation strategy needs to be targeted towards action and can be updated and adapted according to progress made or issues that may arise (Viennet and Pont, 2017[1]).

For its CfE, Scotland followed an implementation process of co-design and co-creation with education stakeholders. Table 5.1 provides an overview of the policy developments from an implementation perspective. The co-construction process has been undertaken through boards, such as the initially created Curriculum Review Group. Following the initial design of CfE, a Curriculum for Excellence Management Board was created to include key education stakeholders and review progress from a managerial perspective. The analysis of this group's meeting minutes shows that the discussions consisted mainly in progress updates in the various allocated tasks, but not in detecting challenges in CfE implementation, nor suggesting concrete solutions. In 2012, after implementing CfE in schools started in 2010, a specific implementation group was created under the CfE Management Board. This group focused on the implementation of CfE until its dissolution in 2017, when it was replaced by the Curriculum and

Assessment Board (CAB). The CAB meets regularly to review curriculum and assessment progress in relation to CfE and beyond. It undertakes analysis, inquiries and provides advice to the Scottish Government on emerging practice.

Table 5.1. Overview of CfE policy developments from an implementation perspective, 2002-20

	Implementation process lead	Policy document/progress
2002	Scottish Government (formerly Scottish Executive)	National Debate on Education: National consultation to determine what was working well and what needed to change in school education
2003	Scottish Government	Curriculum Review Group established to identify the key principles to be applied in the curriculum re-design for ages 3 to 18 years
2004	Curriculum Review Group together with Scottish Government	*A Curriculum for Excellence* published
	Curriculum Review Group	Research and review process by researchers to review existing guidelines and research findings Focus groups with practitioners and begin the process of developing simpler, prioritised curriculum guidelines
	Scottish Government	*Progress and Proposals* published *Building the Curriculum* series begun
2007-17	CfE Management Board created: Curriculum change process	Draft Experiences and Outcomes published
2008	CfE Management Board	*Building the Curriculum 3: A framework for learning and teaching* published
2009	CfE Management Board	Publication of the new curriculum guidelines
2010	Schools	Implementation of CfE in all schools
2011/12	Scottish Qualifications Authority (SQA)	Developing new qualifications
2012-17	CfE Implementation Group created (part of CfE Management Board)	
2014	Scottish Government	Developing the Young Workforce: Scotland's Youth Employment Strategy (DYW)
2014	SQA	First Certification of New Nationals 1-5
2015	SQA	First Certification of New Higher
2015	Scottish Government	The Scottish Attainment Challenge
2016	Scottish Government	National Improvement Framework (NIF)
2016	Scottish Government	New Inspection model
2016	Scottish Government	*Delivering Excellence and Equity in Scottish Education: A Delivery Plan for Scotland* published
2016	SQA	First Certification of Advanced Higher
		CfE learning benchmarks
	CfE Management Board, upon recommendations by a dedicated working group and the SQA	Revised National Qualifications (agreement to move National 5, Higher and Advanced Higher qualification courses from a modular to a linear format, with endpoint assessment, removing the requirement for units). First certification of the revised National 5 assessments in August 2017
2017	Curriculum and Assessment Board (CAB): Provide leadership and oversight of curriculum and assessment	
2018		*15-24 Learner Journey Review* report published
2018		The Scottish Learner Panel created
2019	Scottish Education Council established: Provide oversight of improvement in education.	
2019	Curriculum and Assessment Board	Refreshed curriculum narrative
2020	Scottish Government – Education Scotland	National E-learning offer (COVID-19)

Source: Scottish Government (2021[2]), *Curriculum for Excellence 2020-2021 - OECD review: Initial evidence pack*, https://www.gov.scot/publications/oecd-independent-review-curriculum-excellence-2020-2021-initial-evidence-pack/.

This CfE implementation process followed a clear path in its inception, with the preparation of all the materials for implementation in schools from 2010. As schools had to implement the curriculum, the

Scottish Government published materials and provided support based on advice from the CAB and others bodies. Following the publication of the *Building the Curriculum* series, however, the system adopted a somewhat ad hoc approach to CfE implementation and review. The material produced to support implementation came from various sources that were not always aligned, and lost coherence, until the *Statement for Practitioners* was published for clarification purposes in 2016.

The Scottish approach did not plan for a formal review of the CfE framework, although such a review cycle is common practice in curriculum policy in other education systems. The review conducted by the OECD in 2015 provided valuable insight about Scottish education, but its focus on CfE was solely in Broad General Education (BGE). What is more, an externally-led review, while useful, can only support the processes of internal review that most systems have in place for large-scale curriculum initiatives. Shaping and implementing education policy is always complex due to changes in governments and governance; the large number of stakeholders involved; and the long timespan associated with the implementation of education policy relative to other areas of public policy (OECD, 2020[3]).

The vision of CfE has always been powerful, and the four capacities to be developed by all students offer a convincing set of success indicators for CfE. Complex competencies, such as the four capacities, can be extremely challenging to measure, however. It might be for this reason that initially, there was no long-term strategy established or metrics defined to evaluate progress with CfE implementation. Various policies introduced since CfE have addressed this initial gap to some degree. *The Learner Journey* review highlighted some of the impacts of CfE, and the NIF set a framework that could integrate indicators to understand progress with CfE. During the review meetings, the OECD team often heard that CfE was a philosophy rather than a curriculum policy. The lack of a clear implementation and evaluation strategy could have contributed to this thinking.

In 2016, following the OECD review of the Scottish education system, the Scottish Government took a series of measures to streamline, clarify and refresh CfE. These were meant to further clarify CfE and sharpen government priorities. Those measures also aimed to enhance understanding of progress in a range of areas highlighted in CfE and the equity and quality framework for action. More supports and guidance were offered to schools; and additional information and research were produced on progress made with CfE.

Many stakeholders are involved in analysis and reviews of CfE, bringing numerous perspectives to the table. From the OECD team's school visits, it was evident that CfE was implemented and consolidated in schools, especially through BGE. According to stakeholders, the intended learning is in place, and schools have been growing more confident in adopting CfE to match their learners' needs. There has been clarity on the four capacities and the objectives, but these have also been mixed with new priorities that may not align with CfE. As policy messages evolve, there is a risk that the focus on CfE disappears, risking that schools lose track of the overall coherence between CfE and the rest of the school improvement initiatives. Although Scotland's various school improvement initiatives are important, there is a need for coherence, for an organising structure, which CfE offers but can only deliver if it remains in focus.

CfE has been underway for ten years at the time of writing this report. A traditional policy implementation strategy is not what is needed. Rather, it would be valuable if Scotland developed a clear concept of where CfE needs to go and what actions need to be taken, so education in Scotland continues helping all young people learn, develop their resilience and thrive in the 21st century. It is unclear whether the CAB or any other system leader has a clear long-term strategy in relation to CfE or is reviewing its evolution in light of current developments and research in education more broadly. Having a longer-term strategy for CfE, for its revision if needed, with defined responsibilities and institutions that are stable and prepared for shaping the next steps would be an asset to CfE and the Scottish Government. Such a strategic and institutional development would also support policy alignment for schools and a coherent vision of student learning from ages 3 to 18 years. For the next steps, it will be important to develop a shared understanding of CfE's

contributions to effective student learning and well-being and to set up a policy-making and implementation process for CfE that is stable and has stakeholder support.

Progress with implementation of Curriculum for Excellence

The previous chapters pointed to Scotland's considerable achievements with CfE and to notable progress since 2015. The analysis also raised several issues that should be tackled for schools across the country to continue successful enactment of CfE, and for students to have a coherent learning trajectory from ages 3 to 18 that consolidates the four capacities consistently and prepares students for their future.

A bold initiative requiring a focus on the learner's journey

CfE as a policy was a bold initiative in its inception that has progressed and reached schools across Scotland. CfE's vision to achieve excellence for all students, embodied in the four capacities, is widely shared by stakeholders. Although initially developed in 2002-04, the vision remains relevant for its bold, future-oriented approach and continues to be an inspiring example equated with good practice internationally. Anecdotal evidence and international surveys point to some success in the impact CfE is having on learners' experiences, attitudes and outcomes, even if there is limited evaluation data at the level of Scotland's system. The emphasis on school-based curriculum design results in a wide variety of practices between schools and classrooms, which is positive when it allows teaching to respond to students' needs and ensure all can succeed. The attainment gap also appears to have somewhat decreased over the last decade.

The 20 years since the formulation of CfE have been marked by accelerated social, cultural and technological changes in Scotland and beyond. Two decades of educational research have given rise to new insights into how best to support student learning and into the kind of knowledge, skills and attitudes students need to succeed and progress as learners. That CfE has stood the test of time and remains influential in curriculum policies across the globe is a testament to the strength and future focus of the original vision. It will remain relevant for Scotland and beyond if the leaders and stakeholders responsible for CfE look ahead to the next decades, informed by the insights from implementation from the last two decades.

CfE's complex framework works well in most schools in Broad General Education (for learners aged 3 to 15 years) and for learners taking Advanced Highers, where the concepts, pedagogical and learning approaches are coherent, and the implemented school curriculum appears consistent with policy intentions. The OECD team observed that knowledge still plays a key role in schools' curricula, and more prominently in the Senior Phase than in BGE. However, there is some ambiguity about the role of knowledge in a 21st century curriculum framework. Twenty years ago, many school systems adopted curricula that emphasised skills as a counterbalance to more traditional emphases on lists of "content" to be covered. The focus on these 21st century skills was also reflected in assessment reforms. In recent years, education systems – including Scotland's – have begun to consider how best to ensure that all students have access to 21st century knowledge and ways of knowing that support future learning and the development of metacognition. As a result, adjustments might be needed both in the concepts of CfE and the tools to put them into practice. What is more, the structure, learning practices and assessment approaches in the Senior Phase need adapting to be consistent with CfE's vision, and to allow for the smooth curriculum experience promised to learners from age 3 until the age of 18. Fundamental issues in the design of CfE for this phase need addressing, such as the balance between breadth and depth of learning, the role of knowledge, student choice, and alignment with student assessment for qualifications.

Teachers are well-trained and respected professionals in Scotland, and school leaders have developed strong pedagogical leadership capacities. In general, both teachers and school leaders are committed to

varied teaching approaches for student learning and have proven their ability to develop schools' own curriculum with some examples of excellent practice. Curriculum design and continuous improvement in teaching and pedagogical leadership require time and professional investment, which schools can only develop with continuous support from the system.

Towards a shared ownership of Curriculum for Excellence

Stakeholder engagement is at the heart of Curriculum for Excellence. Significant efforts were made to engage stakeholders throughout CfE's lifecycle, which contributed to wide support for CfE as a direction for Scottish education. Consultation and collaboration are at the core of CfE processes, as much in policy design as in curriculum planning, development and enactment. There seems to be a gap, however, between stakeholders' intense involvement and the impact of these views on effective enhancements to CfE implementation. Learners' input, in particular, does not appear to be taken into account enough in decision making, although Scotland is committed to consulting its youth. More generally, greater clarity is needed in the purpose of stakeholder engagement initiatives around CfE, and consistency in the use and impact of stakeholders' input.

The great degree of stakeholder involvement around CfE created the conditions for shared ownership and wide support of CfE's vision. Stakeholders agree that schools and the profession should hold responsibility for the conception, implementation and outcomes of their own curricula, provided the rest of the system fulfils their own responsibilities to support schools and the profession within a clear policy framework. At the same time, CfE ownership was most often described as fragmented, with many owners lacking clarity about their responsibilities. 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.

Scotland successfully developed an education language to support the philosophy of CfE that made its way into daily discussions of education policy makers, teachers and learners alike thanks to communication efforts by system leaders. CfE allows for flexibility in school curricula, so it was pivotal to ensure a shared understanding of CfE's vision and policy objectives. However, the constant production and recycling of documentation was often described as "overwhelming" by practitioners, and the terminology used was deemed too technical and lent itself to too much interpretation.

Continuing efforts towards alignment

The originality of CfE at the time of its development continues to influence international curriculum policy. Affording autonomy at the school level within a central framework, an innovation that CfE was among the first to undertake at the turn of the millennium, is now widely used as a curriculum design principle. Scotland made considerable progress in developing and supporting teachers' capacity to be curriculum makers, and the capacity of school leaders to lead the process of curriculum in their schools. This work has become more challenging for schools, given the need to respond to multiple new initiatives at local and national levels. A tension exists between Scotland's comparatively high rate of teachers' class contact time and the expectations for teachers to lead and plan curricula locally.

Other education policies were developed to build a system around the innovative philosophy brought by CfE: a pillar for what and how children learn (CfE), a pillar to support children's well-being (Getting it right for every child, GIRFEC) and a pillar to support young people into meaningful work (Developing the Young Workforce: Scotland's Youth Employment Strategy, DYW). Additional initiatives were introduced, such as the Scottish Attainment Challenge in 2015, the National Improvement Framework (NIF) in 2016, the Regional Improvement Collaboratives (RICs) in 2017, and the Joint Agreement on an Empowered System in 2019. Work remains on getting the policies in place that ensure the right balance between CfE autonomy and equity for students, and on aligning and simplifying the many frameworks and strategies for schools.

Early policy developments around CfE promised to align student assessment, qualification practices and system evaluation to the philosophy of CfE. The comprehensive Framework for Assessment designed in 2010 was hailed around the world as an exemplar with a clear focus on the centrality of the learner, and new tools such as the low-stakes Scottish National Standardised Assessments (SNSA) and revised national courses for qualifications were developed. Despite attempts to reform qualifications, misalignment between the aspirations of CfE and the system of qualifications has become a barrier to the implementation of CfE in secondary education. In addition, the data generated by current system monitoring and evaluation appear limited and do not provide the evidence to fully support and inform the future development of CfE.

Education is traditionally a source of pride in Scotland, which shows in the broad commitment to CfE and to educational excellence for all. It has been granted great importance in the political debate to a degree that would be the envy of many an education system. This importance has sometimes translated into a busy system at risk of policy and institutional overload. The centrality of education in the political debate allied with the absence of an identified cycle of policy review for CfE supported by robust data and evidence results in a reactive and oftentimes political approach, which is not the most efficient way to address issues with CfE and its implementation.

An adaptable approach to implementation

The implementation of CfE has followed a particular path to change without a long-term strategy. The Curriculum and Assessment Board and its predecessor provided a platform to engage many stakeholders, gather input and feedback and develop shared agreements on progress and challenges. It allowed for responsiveness to the challenges raised regarding CfE implementation. The absence of a clearly structured implementation strategy gave schools and local authorities significant freedom and autonomy to design and shape CfE's developments, possibly building capacity on the ground. Efforts were made to communicate about CfE and its developments, but in an ad hoc manner involving many documents, reports, supporting materials, without a clear sequence of events.

For the next steps, it will be important to develop a shared understanding of CfE's contributions to effective student learning and well-being and to set up a policy-making and implementation process for CfE that is stable and trusted by stakeholders. The suggestions proposed below bring together different dimensions to guide the actions of education stakeholders and institutions to consolidate high-quality learning experiences for students in Scotland. The next steps will require refining them from an actionable perspective into a coherent strategy: what needs to be done, by whom, when, and how will it be measured.

Recommendations for next steps: Focusing on student learning progress

Schools in Scotland have been quite successful in implementing CfE and are willing to make changes where challenges remain. CfE is well known and well supported by all those interviewed. It has been developed and improved through a co-design process. While they cannot be attributed directly to the latest reforms, results in global competences of 15-year-old students in PISA could be related to CfE and its broader concepts included in the four capacities. The NIF also shows progress in recent years in a number of indicators related to CfE. CfE also reflects a strong curriculum policy that has given education professionals agency to shape it and enact it in order to adapt to schools' and students' needs. With the first student cohorts having completed their education under CfE, and the experience gained, it is a good opportunity to review practice. It is common across high-performing education systems to review curriculum frameworks regularly, as Japan and Finland do every ten years. It is suggested that students' learning experiences and trajectories should be the focus to define the next steps of CfE's implementation.

Recommendation 1. Balance Curriculum for Excellence so students can fully benefit from a coherent learning experience from ages 3 to 18 years

1.1. Re-assess CfE's aspirational vision against emerging trends in education

Scotland should re-examine CfE's aspirational vision in meaning and practice to take account of developments in education and society over the past two decades, along with emerging trends. The core message of CfE remains relevant and inspirational for its bold, future-oriented approach. It has served as an example to many other countries, and its key message strongly resembles the global vision on education as expressed in the Education 2030 vision of the OECD (the Learning Compass), developed through research and peer exchanges. Scotland worked to refresh the narrative around CfE and develop its benchmarks. However, there still seem to be mismatches between the vision and some of CfE's building blocks. CfE was characterised to the OECD team as a "clash between 19th century assessment and 21st century curriculum", which seems to have contributed to the evolution of several interpretations of CfE's vision. Moreover, although CfE remains future-oriented in spirit, it is important to acknowledge the changes that have occurred both in education and society since CfE's inception.

Scotland could first consider updates to some of its vision's core elements and their implications for practice. Re-examining the vision after a full cycle of practice could help update and adjust core elements in light of over ten years of curriculum design and implementation in Scotland, also taking into account developments in curriculum research and education in general. This exercise needs to be different in nature and outcome from the production of the "Refreshed narrative of CfE". What lessons learnt from implementation and curriculum research might help adjust the vision to fit the ambitions of CfE even better 20 years on? Dialogues between various stakeholders might help clarify and simplify the core philosophy, confirm support, and identify and sharpen the understanding of persistent inconsistencies between ideals and practices. For example, efforts to reduce the attainment gap will not be possible solely through schooling and CfE in particular, as other socio-economic factors influence learner outcomes. It will require broader coalitions with welfare, housing and health policy, for example.

An important issue for clarification in the vision regards the role of knowledge in a 21st century curriculum such as CfE. It seems that the often-criticised lack of harmony between CfE's vision and the programme for the Senior Phase is partly due to the unclear position of knowledge in the four capacities. The role of knowledge in CfE should be made more explicit as part of the vision and the tools to operationalise it (such as the attributes and capabilities of the four capacities, and the "Experiences and Outcomes"). Knowledge could be better integrated into the capabilities and attributes of the "successful learner" capacity. This would allow the fundamental capacity to not only refer to becoming a successful learner in terms of meta-skills, but also to acquiring a solid knowledge base including the four types of knowledge (disciplinary, interdisciplinary, epistemic and procedural); to engage learners with ways of knowing (Boyd, 2019[4]) within and across disciplines; and to strengthen them in their further studies, work and overall development.

Clarifications are also needed around the concept of knowledge itself, recognising that knowledge goes beyond disciplines and subjects; as well as around the way knowledge integrates with skills and attitudes (see the concept of competencies as defined in the OECD's Learning Compass) (OECD, 2019[5]); and with the Scottish capabilities and attributes. Clarifying the role of knowledge in the vision of CfE is the first step to strengthen the coherence of CfE. This will also help re-align learning through BGE and the Senior Phase and support better progression and transition for learners. It will help correct imbalances between breadth and depth of learning (see also Recommendations 1.2. and 1.3.). This is possibly the focus for a first review as part of the structured review cycle (see Recommendation 3.4 below).

It is also important to recognise that the broad aims of CfE and the four purposes require considering the influence of the wider context in their accomplishment. Scotland should define indicators or a "matrix of success" aligned to the vision and four capacities to help understand students' progress across all four capacities. In addition to the National Improvement Framework's measures of literacy and numeracy, other

metrics informing progress on the four capacities are necessary, especially around health and well-being, enjoyment of learning and other key competencies. Although qualifications should remain one of the key indicators of this process, new metrics, along with new data collection tools (see Recommendation 3.3) and a shift in the communication strategy, will create a better understanding of students' progress with CfE and provide a more complete picture.

1.2. Find a better balance between breadth and depth of learning throughout CfE

The aspirations for broad and rich (or "deep") education for all learners should remain a strength of the Scottish education system. Scotland should find a better balance between breadth and depth of learning throughout CfE to deliver on its commitment to provide all learners with a rich learning experience throughout school education. Making the role of knowledge in CfE more explicit as part of the vision (see Recommendation 1.1) will start the conversation on breadth and depth of learning, but additional decisions are needed at several levels regarding the design of CfE. Scotland could consider how the design of CfE can better help learners consolidate a common base of knowledge, skills and attitudes by the end of BGE, and nurture and hone this base for them to progress seamlessly through the Senior Phase and the choices its offers.

CfE should first and foremost aim to develop a broad range of knowledge, skills and attitudes (taken together in "competencies") as a common foundation for all students during BGE. More specialisation can come later in upper-secondary education. Having said that, there is a tension between breadth and depth of learning new knowledge: rich learning also implies "depth" of understanding, to avoid the internationally criticised "ocean-wide, inch-deep" approaches. A possible compromise to finding a balance between breadth and depth of learning would be to build upon CfE's existing broader learning areas in general education, while later in secondary education, discipline-based subjects or work-focused courses become gradually more prominent. In the Senior Phase, when the number of subjects has decreased and once more time per subject is allowed, subjects should show their own merit, but also demonstrate their value in contributing to understanding and skills formation in interdisciplinary domains, themes and projects. Such an approach reflects the contemporary idea of equipping youngsters with a T-profile to prepare them for a range of challenges in further studies, work and life: a combination of strong basic skills in literacy and numeracy plus a broad, interdisciplinary foundation of competencies (the T's horizontal bar), combined with deeper, more specialised disciplinary knowledge (the T's vertical leg). Such subject knowledge should then focus less on the reproduction of facts to be memorised and more on the understanding of disciplinary core ideas and cross-cutting concepts, and also pay attention to characteristic ways of thinking and acting within subject-related professional practices.

A clear conclusion from current debates in Scotland is that breadth of learning cannot be equated with maximising the number of subjects a learner takes. A focus on adding subjects or themes at the school or central level, from which students would then have to choose, does not create a "broad" curriculum. There is, therefore, a need for processes to select, update, prioritise and combine learning aims and contents that give coherence and consistency to student learning trajectories. These processes should make clear and consistent distinctions in curriculum decisions and choices at the system, school and classroom level. In part, the selection, updating, prioritising and combining should be agreed upon as part of a structured review cycle of the CfE framework guided by the need to provide consistency of depth and breadth of learning for students, rather than by a selection of courses or subjects. For example, decisions could be made at this central level about the learning goals and contents of a limited number of core subjects or learning areas that all students would need to study over CfE levels and that would form the basis of progression to the full range of subjects in the Senior Phase. Some of these choices are better left to schools, teachers and learners (and their parents to a certain extent) to allow for flexible choices and variation in curriculum provision. An approach that reflects the principle of subsidiarity is suited to this process. Scotland's intentions for the whole system should be stated clearly and provided in a simple, clear

and precise framework; schools should then be able to add and elaborate on this framework; and stimulate specifications of the "what" and "how" of teaching and learning during classroom enactment.

Following the subsidiarity approach, some guidance should be developed around the role of knowledge and ways of knowing (Boyd, 2019[4]), to help schools and teachers find a balance between breadth and depth of learning. The entitlements and four capacities of the current framework suggest that CfE aims to provide solid foundations for the essential areas of literacy and numeracy and also give ample attention to health and well-being as part of all students' learning experience. Moreover, the CfE framework also provides that all students need a broad offering of learning areas during BGE, while the Senior Phase offers possibilities to specialise. In order to guarantee that this progression is effective and coherent for all students, some common guidance is needed to help schools. At the central level, Scotland might consider refreshing the design of learning areas in BGE to better articulate the knowledge necessary at each stage and by the end of BGE, for all learners to develop broader competencies to prepare for deeper learning and specialisation in the Senior Phase and beyond.

To provide more detail without drifting towards strict specification in learning areas, it may be a helpful first step to formulate big ideas, as a growing number of education systems have been developing. Systems such as British Columbia (Canada), Korea, Norway and Singapore have been selecting broad overarching themes that relate to a number of subjects within curriculum areas of learning. Those key concepts or "big ideas" help ensure overall coherence in the curriculum and thus create criteria for what content should be included and what should be omitted (OECD, 2020[6]). Better defining and using big ideas should help keep BGE broad and bring additional guarantees that BGE builds a strong foundation of knowledge, skills and attitudes common for all learners, beyond just literacy, numeracy, health and well-being. Big ideas could also help better organise learning and its progression from ages 3 to 18.

Overall, Scotland might consider creating guidance about the elements of knowledge to prioritise, and how to select and update and integrate them more clearly in curriculum areas. Guidance on how knowledge might focus on the knowledge and skills needed to progress to and succeed in the next level or phase of education. This guidance should be designed by teams of practitioners, in close co-operation with researchers and other stakeholders, with system leaders and curriculum experts facilitating the work. Teams of teachers from schools or school clusters could contribute and discuss their own knowledge priorities and how they are integrated across the four capacities and explain how they choose suitable pedagogical approaches. These contributions from practitioners should form the basis of CfE guidance on knowledge selection, prioritisation and update, rather than prescriptions "from above". Such a process should use and stimulate horizontal professional collaboration and peer learning to design guidance based on practitioners' experience and input from curriculum experts. Collaboration with external researchers is indeed advisable to increase the quality of those approaches.

1.3. Adapt the Senior Phase to match the vision of CfE

Scotland could consider adapting the pedagogical and assessment practices and the structure of learning pathways in the Senior Phase to enhance learners' experience of upper-secondary education in line with the aspirations of CfE's four capacities. While re-assessing and perhaps readjusting the CfE vision will lessen the mismatches between the Senior Phase and the vision of CfE, it will also help to bridge the gap that students face in their transition from BGE to the Senior Phase. In particular, the adjustments should include considerations on the role of knowledge in the vision of CfE, emphasising its importance for learning along with skills and broader competencies, and clarifying its particular role in 21st century curricula (as opposed to traditional curriculum models). This would also contribute to correcting imbalances between breadth and depth present in the Senior Phase. In addition, challenges exist for curriculum and subsequent assessment re-design in the Senior Phase, which should be better integrated in the CfE framework. This task needs broad and active involvement of representatives from further and higher education and from the world of work. Without addressing these challenges, the practices in the Senior

Phase may continue to lag in the essential curriculum components (aims, pedagogy and assessment) and continue to have a counterproductive influence on Broad General Education.

First, Scotland needs to create more coherence and alignment within the Senior Phase, between the curricular vision, learning goals, pedagogy and assessment approaches. It should consider reviewing the coherence of CfE enactment for learners aged 15 to 18 years, as the qualifications focus the attention on "traditional" exam- and memory-based assessment, and limit the wider purpose and scope of CfE. Scotland may also reflect on the range of learning activities that appear narrow, with more "traditional" instructional patterns and an over-reliance on course and disciplinary knowledge coverage; as well as on the ambiguity on issues of student choice and breadth of learning in relation to the number of subjects, given that many subjects lack time for going into depth. Scotland may consider building on the experience and reasonable coherence existing in CfE for learners aged 3 to 15 years (as well as in Advanced Higher courses), where learning activities seem in line with the vision, and there is a commitment to varied instructional practices. Examples may be taken from the experience of schools that seem to be able to tailor the curriculum to students' needs through the high quality of teachers, educational leadership and local and regional support for schools and professionals.

In addition, the approach to student assessment and the nature of the learning experience in the classroom will not change in the Senior Phase unless the approach to the assessment of qualifications is fully aligned to match CfE ambitions. At this point, it may be useful to consider a range of options that could even be piloted for the overall approach to student assessment:

- more portfolio assessment approaches, with rubrics that consider the entire curriculum spirit (in particular, the four capacities)
- more emphasis on flexible, formative and continuous assessment components than is currently the case (current emphasis is strong on all-in-one final, summative exam events even if other components exist)
- more use of digital opportunities for feedback and feedforward
- maintaining (even strengthening) a strong role for teacher judgements with appropriate, manageable and cost-effective means of moderation.

Second, the Senior Phase needs to offer a clear structure for the diversity of pathways it offers to learners. The OECD team recognises Scotland's numerous efforts to diversify learning experiences in the Senior Phase, seeking variety in the choice of pathways, subject specialisation, and qualifications offered to students, which aligns well with CfE ambitions. A possibility to clarify the structure of the Senior Phase, without restricting its diversity, could be to define a number of typical pathways or profiles for upper-secondary education with a limited number of compulsory courses, specialisation courses, and room for additional or optional units. These should be designed taking into account the need for coherence for students in their learning pathways of CfE from ages 3 to 18 years. Schools' curriculum and timetables within a school should allow for a different student to take the same course, either as a specialisation part of one's profile, or as another's optional course. Such a structure could help students and their parents better understand and navigate the choice of subjects and qualifications, allowing students both to take coherent bundles of courses and to design their own pathway as they see fit. To explore this or other feasible re-design alternatives for the Senior Phase, a wide spectrum of stakeholders, experts and partners from various fields should be involved in a collaborative process.

As a source of inspiration for this process, the conclusions from a recent comparative study on upper-secondary education across nine jurisdictions (O'Donnell, 2018[7]) provides some food for thought for Scotland to enhance the Senior Phase experience. The study supports Scotland's ambitions for its Senior Phase, as it highlights that upper-secondary education systems do not aim for a one-size-fits-all offer but rather to provide students with a range of options with a view to suiting their future destination and specific demands for upper-secondary alternatives to traditional academic pathways.

Other conclusions should further inspire Scotland to enhance the Senior Phase. First, it appears that upper- secondary education systems usually work with defined pathways broadly split between academic, vocational, and in-between tracks to provide some structure to student choice. Although the curriculum is determined by students' choice of pathway, the study of some compulsory subjects is usually a requirement for completion of upper-secondary courses. Bridging programmes to allow more permeability between tracks are developing, which lessen the weight of choice for students. Upper-secondary curricula and assessment systems are closely interwoven and interdependent, and official records of achievement, in addition to certificates, are a feature of this phase, serving the needs of students first, but also of future employers and educational institutions. Finally, the comparison points out that links between upper-secondary education and the previous and next phases of a student's career and education are crucial. Consequently, reforms introduced in this phase can have wide-ranging implications at individual and system levels.

1.4. Continue building curricular capacity at various levels of the system using research

Scotland should continue building curricular capacity at various levels of the system using research. It should do so by developing the environment of curriculum design support around schools, including in supporting exchange and collaboration between practitioners for curriculum design and experimentation within and across schools, and collaboration between schools and universities.

With regards to the process of continuous curriculum improvement, Scotland should keep investing in curricular capacity building. The primary focus of those investments should be to strengthen the capacity for curriculum design by teachers and school leaders at local school levels through a variety of measures: time facilities; creating space for joint curriculum design and experimentation space within schools; fostering exchange and collaboration between teachers and school leaders across schools; providing school-specific support; encouraging collaboration with universities; and strengthening the curricular nature of regional networks.

Such an approach is also in line with the strategic principle of subsidiarity. Scotland should leave curricular decision making as much as possible close to practice, within a system-wide framework developed with schools and practitioners. This does not imply that schools should work in isolation from other agencies and stakeholders. Dialogue and interaction should be promoted with other system partners (teacher educators, administrators, inspectors, and the like).

In relation to capacity building at various levels and for various purposes, Scotland should intensify and co-ordinate research initiatives along various lines:

- Site-specific, collaborative approaches of researchers and practitioners around curricular issues, combining (joint) teacher professional learning, classroom improvement, school development; all contributing to site-specific curricular capacity building on the ground but also to (more generic) knowledge accumulation about successful curriculum change, for example by identifying and explaining successful practices.
- More system-wide monitoring on both the enacted curriculum (notably classroom practices) and the attained curriculum (student experiences, outcomes and destinations) to feed continuous improvement of curriculum policies and practices.
- Both approaches should contribute to a better collective, systemic learning system, also, in view of future, more periodical curriculum reviews (see Chapter 4), and hopefully also reducing excessive politicisation and ad hoc nature of the educational debate.

Recommendation 2. Combine effective collaboration with clear roles and responsibilities

2.1. Ensure stable, purposeful and impactful stakeholder involvement with CfE

System leaders at Scotland's national and local levels could continue encouraging the involvement of stakeholders (and in particular, students) with CfE through well-structured and clearly defined engagement initiatives. Stakeholders need to see how their contributions are used in the consultation and how their engagement informs actions and decisions. Their involvement with CfE should follow a stable and purposeful approach that results in effective contributions to decision making. Currently, the sheer number of "invited" engagement mechanisms by system leaders, and of stakeholders' own initiatives blur the landscape, work against the effective inclusion of stakeholders in decision-making processes, and lessen the truly collaborative approach that Scotland could benefit from to enhance CfE implementation. With CfE in place for over a decade, system leaders with stakeholders should adopt a more stable and structured approach to involvement. For instance, and in keeping with Recommendation 3.4 made below about review cycles, opportunities for stakeholder involvement could be built within an overarching review cycle, which could help make stakeholders' input more impactful.

Successful involvement requires clarity of purpose and an engagement design that reflects this purpose. Stakeholders can be involved in a myriad of objectives, ranging from information and consultation, to ongoing involvement, collaboration and empowerment, each a strong tool for both public decision makers and stakeholders, but only if chosen and designed in alignment with the purpose of engagement. For instance, one of the conclusions from Chapter 2 is to review the Senior Phase to align it with CfE ambitions. With this goal in mind, system leaders could design a large-scale review process with the goal to co-design a Senior Phase that would align with CfE ambitions. This would include at least two parts of engagement: a national consultation with the public on what they believe should be the purpose and structure of such a Senior Phase; and a series of working groups mixing (for instance) learners, teachers, school leaders, university recruitment officers and professors, employers and scholars specialised in curriculum, assessment and upper-secondary education.

The example of Ireland's National Council on Curriculum and Assessment review proposed in Chapter 3 (Box 3.2) could serve as inspiration, although Scotland would need to design its own approach. Alongside this, the approach taken by other countries to involve students' voices in the curriculum review process could also be considered. For instance, Finland consulted with its student population before re-designing its curriculum through a survey to which 60 000 students from lower- and upper-secondary education responded and through other channels for students from primary schools. This information helped ensure that Finland's re-designed curriculum reflects students' needs and that students feel engaged as agents of their own learning (OECD, 2020[3]).

Second, system leaders should also fulfil the promise of genuine stakeholder engagement and let stakeholders' feedback, insight, and contributions to collaborative endeavour influence decision making in a transparent way. In keeping with the hypothetical example of a Senior Phase review, this would imply drawing concrete orientations from the national consultation, which would guide the working groups and the resulting Senior Phase renewal. A way to encourage stakeholders and reassure them of the genuine nature of their engagement is to explain ahead of time how their input will be used, with some degree of details, and then respect this involvement contract when the time comes to use their contributions for decision making.

2.2. Revise the division of responsibilities for CfE

Scotland's system leaders and stakeholders could revise the current allocation of responsibility for CfE, including responsibilities for its strategic direction, its reviews and updates, and the response to schools' needs for support with curriculum issues. To fulfil Scotland's commitment to shared ownership of CfE, system leaders and stakeholders need to clarify the division of responsibilities and to maintain it over time.

There are many different structures for curriculum policy and implementation across education systems, given the wide range of governance and institutional arrangements. Effective structures are transparent, with a clear and delineated remit, and persist over time (including through election cycles). They establish trust with stakeholders through high-quality and sustained engagement.

What does a clear division of CfE responsibilities imply? First, system leaders and stakeholders need to spell out the roles and related responsibilities that CfE calls for. This implies considering questions about key components of CfE such as:

- Who is in charge of CfE's strategic orientations and coherence?
- Who is responsible for reviewing the CfE framework and keeping its key components up to date with research and societal developments?
- Who takes charge of providing schools and practitioners with the support they need to design and enact their curriculum?
- Who holds responsibility for offering diversified learning experiences to learners?

Currently, responses to these questions vary too widely across Scotland.

Second, duplication of responsibilities should be avoided when feasible, which could lead to the redistribution of some responsibilities to one entity or to the merging of some committees whose mandates and membership might be duplicated. In some instances, some overlap between responsibilities is unavoidable. In these cases, overlap should be minimised and structured, by specifying levels or areas of responsibilities and relationships between the various stakeholders involved. In other cases, there might be gaps in the responsibility structure, or the current responsibility holder is not the most adequate to continue supporting or implementing CfE.

Third, stakeholders who hold responsibilities should have matching capacity and resources. On several occasions, it was made clear to the OECD team that duplication of responsibilities sometimes happens because the agency or institution with the official mandate for an aspect of CfE does not have the capacity, resources or ability to fulfil its responsibilities. Once clarified, individual responsibilities must also be considered in relation to each other, and highlight what stakeholders need from others in order to fulfil their responsibility. Once an effective division of responsibilities has been clarified and possible changes have been agreed upon with stakeholders, the responsibility structure should remain unchanged for a number of years.

2.3. Structure a coherent communication strategy to support developments of CfE

System leaders should develop a communication strategy about CfE and collaborate with practitioners, scholars and other CfE stakeholders as they do so. The purpose of CfE communication is no longer, after more than a decade, to convince people to adopt a new policy. However, the policy and its implementation processes can evolve, and these evolutions need to be communicated effectively. The first step will be for system leaders to develop a strategic approach to CfE communication, planning the necessary official communications, events and other publications ahead of time and aligned with CfE developments. In this, Recommendation 3.4, proposed below, on creating structured review cycles, goes hand in hand with a more strategic approach to communication. In the case of Scotland, an effective communication strategy would offer clear messages that are simple to understand and based on educational evidence; and be coherent throughout the system, even if it involves different actors.

To be effective, communication around CfE require sharper messages and more accessible language. When developing this communication, system leaders should sustain a dialogue with the profession and key stakeholders about the language of CfE, clarifying or doing away with "technical jargon", and agreeing on the definition of terms and revising the existing documentation through this lens. The effectiveness of the communication strategy also relies on selecting an appropriate medium and language to engage with

stakeholders, as the trust vested in the communicator affects how the received information will be interpreted (Gouëdard et al., 2020[8]). This implies producing only those documents and communications that are necessary to the understanding of new initiatives, for instance.

Recommendation 3. Consolidate institutional policy processes for effective change

3.1. Provide dedicated time to lead, plan and support CfE at the school level

Scotland has made considerable progress in enhancing the quality of school leadership and in professional learning across the school system. Supporting a curriculum as ambitious as CfE into the future, and ensuring that all learners engage in and benefit from high-quality learning experiences will require sustained support for school personnel. Other recommendations in this section will be relevant in that context; better alignment and transitions and a more coherent policy environment should make for a less bureaucratic and more streamlined system for all and give school leaders more time to lead curriculum making in their own schools. While teacher workload was not raised in discussions with the OECD team, teacher time was. In that context, in support of the next phase of development of CfE, the OECD team recommends the provision of additional, dedicated and ring-fenced time for all teachers, for curriculum planning, for monitoring of student achievement and in support of moderation of assessment outcomes.

Of note, Scotland's teachers have one of the highest rates of class contact across OECD countries. There is an obvious tension between this comparatively high rate of class contact and the expectations of CfE that teachers lead and plan curriculum locally. There are several alternatives to provide this dedicated time to teachers. Some countries, like Ireland, have reduced class contact time. Each teacher involved in curriculum planning, monitoring student achievement and moderating assessment outcomes had their class contact time reduced by 22 hours across the school year, with one additional hour per week allocated to moderation. To avoid difficulties with the provision of supply cover, an additional 670 full-time posts were allocated to the secondary sector to support that policy decision. An additional two hours were allocated on a rotating basis to teachers leading moderation processes.

Reducing class contact time in any school system makes sense only when the teaching workforce is already well qualified and has demonstrated capacity for innovation and collaboration, and when school leadership has the capacity to ensure that this scale of investment delivers improvement for learners. Another strategy could be to build upon the additional funding for teacher recruitment provided by the Scottish Government in 2020 and reserve some of the resulting additional teaching time to curriculum planning, monitoring student achievement and moderation.

3.2. Simplify policies and institutions for clarity and coherence

Scotland should consider policy and institutional simplification, including ending or combining some policy initiatives and strategic frameworks around CfE. The system shocks caused by the current pandemic provide an opportunity for simplification and consolidation so that the efforts of school and system leadership can be re-focused on student learning, which is at the heart of CfE. This simplification should extend to institutions and agencies in the education policy system in Scotland. The OECD team is conscious that many of the agencies and organisations working across education in Scotland are themselves the products of reviews or consultation processes or consequences of public sector funding challenges. However, the team believes that a tipping point has now been reached. There is a risk that some previous structural changes to support the implementation of CfE may now be a barrier to its future development. It is possible to sustain stakeholder engagement and support, and strong deliberative processes while at the same time having fewer organisations and perhaps fewer but more focused and meaningful consultation processes.

Given the high international profile of Scotland in curriculum innovation policy and research, and the need to establish clear ownership for CfE, consideration should be given to a specialist stand-alone agency

responsible for curriculum (and perhaps assessment) in the future. Aware that this was a situation that existed historically in Scotland, the OECD team believes that the complexities of contemporary and future curriculum, especially as envisaged in CfE, need dedicated support and ownership. The remit for an agency of this kind could include in the short term:

- updating the skills, knowledge and attitudes in the CfE framework to take account of recent and future developments, such as the OECD's Learning Compass, for example.
- identifying and articulating the balance of 21st century knowledge, skills and attitudes associated with each level that gives those moving to the next level the opportunity for successful progression and subsequent success in learning.
- communicating the future direction of CfE to all stakeholders, as suggested in Recommendation 2.3.
- contributing to (or leading, depending on the outcome of the assessment review) the next stage of the development of national assessment in Scotland, aligned with CfE.

In the medium to longer term, this agency would be responsible for the ongoing monitoring of the most effective balance between flexibility and prescription and between personalisation and equity. Engaging with international networks to ensure that Scotland's curriculum is benchmarked against international development on an ongoing basis and commissioning research in support of both of these goals would also be part of the remit of this agency. A key task for this agency would need to be to periodically review CfE and its different areas of learning to ensure they are up to date to prepare students for the future.

Revisiting CfE's vision and implementation will also imply some work related to institutional responsibilities for inspection. Historically associated with innovation in school evaluation, Her Majesty's Inspectorate of Education (HMIE) in Scotland has influenced the development of inspection in a number of school systems. A refreshed Inspectorate could focus on:

- advising on, or commissioning research in and with schools, to inform school monitoring and evaluation, and system intelligence on student attainment and school quality – all of which could be used in a cycle of curriculum reform (see below)
- building on current strengths in peer and self-evaluation for schools that includes CfE implementation at the school level
- 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.

As a national agency, an Inspectorate is a key policy tool for consistency and comparability across federated or devolved systems. This is an important consideration for Scotland, where the Inspectorate is currently part of Education Scotland. The need for greater assurance that national aspirations were being delivered for all children and young people was clearly evident in discussions with the OECD review team. Other education systems, such as Ireland and the Netherlands, have their Inspectorate as part of the ministry but with statutory independence and a clear regulatory and evaluation remit.

3.3. Align curriculum, qualifications and system evaluation to deliver on the commitment of Building the Curriculum 5

Aligning qualifications, system evaluation and curriculum to deliver on the commitment of *Building the Curriculum 5* is essential. Scotland could first identify and develop approaches to student assessment that could be used in school and external settings at Senior Phase levels, in alignment with the four capacities and CfE philosophy. Second, Scotland could re-develop a sample-based evaluation system to collect robust and reliable data necessary to support curriculum reviews and decision making. Actions in two areas are needed to support the assessment framework outlined in 2011. The first concerns qualifications

in the Senior Phase. The second concerns the commitment to ongoing monitoring of local and national progress and achievement.

The commitment made in *Building the Curriculum 5* that the review of qualifications would align with CfE has not been delivered to date. For the secondary sector, in particular, the consequent absence of alignment between curriculum and assessment is the single biggest barrier to the implementation of CfE. The OECD team found complete consensus on this issue, but no enthusiasm for a root and branch review of qualifications, given the disruption to the system that would follow, and no agreement as to what a qualification system aligned with CfE would look like. The contestations in the past around the development of the qualifications as part of the CfE reforms, including difficulties with unit-level assessment and the impact on teacher workload of the quality assurance measures, remain unresolved. As time passes, these unresolved issues have become increasingly problematic for the system. The OECD team was struck by the lack of reference to the National 4 and 5 qualifications in discussions with stakeholders about assessment in the Senior Phase.

Developments in the arrangements for qualifications that allow students to access a wider variety of courses and learning opportunities either within schools, from local colleges or with other local partners were strengthened with the DYW in 2014. That all students can have access to broad learning opportunities, even alongside more coursework for academic studies, supports CfE's emphasis on personalised learning. This development was generally viewed as positive, although some stakeholders expressed a concern that the complexity of the qualifications offering in the Senior Phase was difficult to explain to parents and learners.

However, the emergency measures that have had to be introduced in response to COVID-19 may provide some possibilities for development in the short term that could be the basis for longer-term change. A key question that would require some consideration would be whether the agency responsible for curriculum proposed above should also be responsible for assessment design for learners from ages 3 to 18. A separate body might be responsible for the regulation and quality of qualifications, currently part of the remit of the Scottish Qualifications Authority, but the development work would be undertaken alongside the development of the curriculum.

While this OECD report does not tackle in-depth the development of student assessment, a separate working paper will outline Scotland's challenges and options to enhance student assessment and qualifications. The working paper aims to inform deliberations on how to move forward with assessment and qualifications in the Senior Phase in the future, based on a comparative perspective of student assessments. A summary of its initial findings is provided here to inform this recommendation (Stobart, forthcoming[9]):

- There may be alternatives for recognising the range of achievement at the end of compulsory education to the current approach of examination certificates for subjects passed. A school profile is already in use, prepared by the school at the end of Senior 3, which could be continued into S4 and developed, for instance, into a school graduation certificate at 16. For the majority of students who stay on into post-compulsory education, the Higher, Advanced Higher and other qualifications' results would be used in selection and progression processes.
- The demands of the examination system attract criticism from students and educationalists. There is debate about whether the assessments at S4, S5 and S6 should be seen as a step-by-step "ladder" of qualifications up which students progress, or whether students should simply take a single "exit" examination at the appropriate level (for example, National 4 for school leavers; Highers for Higher Education; Advanced Highers for university entrance both inside and outside Scotland).
- A broader approach to external student assessment would allow SQA to explore a wider range of assessment options, including more use of information technology to provide online examination resources and more interactive approaches; opportunities for candidates to use computers to

respond; incorporation of ePortfolio and personal projects for external marking; more use of oral presentations and practicals as a way to broaden the assessment formats. Approaches allowing for fuller alignment with 21st century curricula, as in CfE, include:

  - a more central role for continuous teacher assessment during the course, based on classwork and school-based tests
  - teacher set and marked work that is externally moderated by other teachers
  - externally marked projects and extended essays
  - oral and practical presentations.
- As evidenced during the COVID-19 pandemic, these approaches also offer greater resilience where there is a major disruption. Adoption may require Scotland to further decentralise some of its assessment procedures while further developing teachers' assessment literacy in order to expand the professional capacity of schools in assessment.

None of these recommendations requires any immediate change for schools or for SQA. In the short term, it would be business as usual in the Senior Phase. However, the setting of a timeframe for change and the generation of an evidence base, together with some of the structural changes proposed in organisations and agencies, would signal the policy direction and generate an evidence base to inform any changes.

A number of initiatives have been put in place to support the ongoing monitoring of student achievement since the introduction of CfE. Reporting on the levels has its limitations, given that they were designed to support teacher planning and judgement and not to measure national progress. Small changes in data of this kind cannot give the system the intelligence it needs to monitor the achievement of particular groups of students within the cohort. Similarly, while the census-based assessments (SNSA) are underway, the purpose and usefulness of these are already being questioned. Designed to provide data to support teacher judgement and information for system monitoring, it is questionable whether census-based assessments of this kind can serve both purposes well. The Framework for Assessment is ambitious on the kinds of monitoring needed to support CfE over time. Three priories are identified for the range of information needed: information to support an account of success at local and national levels; information that describes progress and achievement against standards and expectations; and a particular focus on supporting points of transition in the system.

The OECD team believes that there is now an urgent need for robust, reliable data to support these priorities and support wider policy and decision making, as well as the curriculum review cycle discussed below. Previous attempts at this kind of sample monitoring were not successful for a range of reasons: the tests that the SQA administered provided data only at the national level; they were administratively complex and expensive; and time-consuming for schools to administer. The experiences of other systems in recent years in building these sample-based systems that make very little demands on teachers and schools but provide extremely useful information can inform the deliberations in Scotland. These long-term monitoring arrangements allow for particular focus on under-achieving groups within the population and give rise to a dataset that can be made available to independent researchers for additional data mining and research. The arrangements in Ireland are noteworthy for their longevity and how the data continue to be used by a wide range of agencies, notably, by the National Council for Curriculum and Assessment in its review processes (see Box 5.1).

Box 5.1. Monitoring student achievement over time in Ireland

The long-established National Assessment of Mathematics and Reading Skills (NAMER), running in Ireland since 1972, has consistently provided data to the Irish system that has informed key decisions on a wide variety of policy priorities, such as closing the gap in literacy and numeracy attainment in high

poverty schools, Irish-medium education, and the new language curriculum for primary schools. Data have been used to show the impact of initiatives and to modify and refocus as needed.

Sample-based monitoring systems of this kind require a long-term commitment and sustainable funding, as they need to outlive governments.

Source: Educational Research Centre (2021[10]), "National Assessment of Mathematics and English Reading (NAMER)", https://www.erc.ie/programme-of-work/national-assessments [accessed on 22 March 2021].

In commissioning a programme of independent research on the impact of CfE, Scotland should consider a longitudinal cohort study, of one or both phases of the system, with a focus on the student experience of curriculum and assessment, student achievement, student engagement with learning, subject choice and equality of outcomes for a representative sample of students across different kinds of schools. Tracking the impact of curriculum review and proposed assessment changes through such a study would provide rich data to inform ongoing review and evaluation and important information on the differential impact of changes on particular groups of learners.

3.4. Develop a systematic approach to curriculum review

Scotland could consider establishing a systematic curriculum review cycle with a planned timeframe and specific review agenda, led by the specialist stand-alone agency proposed in Recommendation 3.2. Data collected through ongoing monitoring, together with independent research and intelligence from the HMIE's inspection of education, can inform cycles that address particular aspects of CfE within a planned and specified timeframe. Such a planned and systemic approach to review might serve Scotland well, given the level of public interest in education. An agreed systematic approach would also reduce reliance on external independent reviews when controversies arise and build internal capacity for curriculum monitoring. A review cycle might also reduce the need for ongoing guidance and clarifications and give the system greater stability overall. The energy of leaders could be redirected to focus on the implementation of CfE in their schools rather than responding to the most recent update or clarification. A review cycle would support CfE in coherence with the earlier Recommendation 3.2 about granting curriculum leadership and development responsibilities to a stand-alone agency.

Moving in this direction needs to be carefully planned, as it is likely to require some organisational re-structuring so that it is clear to the system – and to the wider public – which organisation is responsible and accountable for the processes and quality of the review and the speedy implementation of the recommendations. In general, systems with specialist curriculum units or organisations assign the review responsibilities to the same agency, with some distance between the work of the review and central government to allow for clear lines of reporting and responsibility. – the National Council for Curriculum and Assessment in Ireland, for example, and the Australian Curriculum and Assessment and Reporting Authority. In both cases, the central government can request a review of a specific area, independently of the agreed cycle. This 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.

Such a systematic, more apolitical approach is well suited to a system such as Scotland's, where there is a high level of interest in education.

Recommendation 4. Lead the next steps for Curriculum for Excellence with a long-term view

Building on the system's existing strengths, Scotland should consider how to take on board the recommendations in this report as a coherent package rather than individual policy actions for shaping the

next steps. Leading the change process itself will require reinforcing the stability, trustworthiness and effectiveness of the decision-making processes, especially to define the next steps of CfE: what needs to be done, by whom, when and how it will be measured. On this last point, Scotland should consider setting up the metrics needed to understand progress with implementing CfE actions over the long run.

This will provide a platform for effective and sustained implementation and review of the change process and how it is actually reaching its objectives to help all learners achieve excellence. Scotland can adopt a structured and long-term approach to the ongoing implementation of CfE, which builds on the strengths of the system and the policy to tackle its challenges. The continued efforts made throughout Scotland to develop and improve CfE are a testament to the system's long-term commitment to educational quality. The effectiveness of these efforts has been lessened, however, by their ad hoc nature and the difficulties in sustaining their coherence in the absence of a structured approach to implementation.

Planning a structured and long-term approach to CfE implementation from a central government perspective will help reinforce the policy's internal coherence (the design and eventual review of its many building blocks) and its external coherence with other education policies. Paired with collaborative ownership of the policy, it will offer better guarantees for the sustainability of Curriculum for Excellence. In practice, the approach to CfE's ongoing implementation can be better structured by systematically specifying the actions that need to be taken for a given development of CfE; clarifying the roles and responsibilities of each actor; agreeing with key stakeholders on a timeline; and allocating the resources necessary for completion of the actions.

Adopting a long-term focus with CfE means thinking several years down the line and keeping abreast of the emerging trends that affect education in a way that nurtures student learning and experience in Scotland. A long-term focus in the approach to CfE's ongoing implementation avoids the trap of piecemeal policy making, and concentrates efforts on the initiatives that serve students and their learning, and reinforces the sustainability of the education system.

This report provides a set of recommendations that can be weaved together and considered for this structured approach to the future of CfE. Each recommendation points to a number of actions that should be taken to strengthen CfE and tackle its ongoing implementation challenges. However, they need to be considered as a coherent package rather than as individual policy actions. A structured approach to CfE implementation, building on the system's existing strengths and this report's recommendations, can help Scotland not only tackle ongoing or future challenges for CfE but also provide a platform for effective and sustained review of the change process and how it is reaching its objectives to help all learners achieve excellence.

The OECD team proposes that Scotland reviews the recommendations through an actionable lens, provided in Table 5.2, and suggests the following action plan:

1. Start by re-assessing the vision of CfE to take on board social and economic developments, emerging trends in education and up-to-date research (Recommendation 1.1).
2. Define the indicators that can support progress with the implementation and impact of CfE (Recommendations 1.1 and 1.4) and establish a communication strategy that can be updated to support CfE's developments (Recommendation 2.3).
3. Revise the roles and responsibilities of those stakeholders involved in CfE (Recommendation 2.2). This will include defining the concrete role of the institution that should take the main responsibility for CfE (Recommendation 3.2). This institution can then establish a systematic approach to curriculum review (Recommendation 3.4) and set up consultations to explore a range of issues raised in this assessment: the balance of knowledge across the different stages of CfE (Recommendation 1.2), between breadth and depth of learning (Recommendation 1.3).
4. Work on developing the approach to stakeholder engagement with CfE ensuring stability, purpose and impact (Recommendation 2.1).

5. Work with SQA and other related institutions, including consultations, to consolidate an assessment system that aligns with the CfE vision and student learning needs (Recommendation 3.3).
6. In parallel, discussions on teacher and school leadership time and professional development needs may be organised by the Scottish Government and Education Scotland (Recommendation 3.1).

Table 5.2. Planning next steps for Curriculum for Excellence

Recommendations	Concrete actions	Indicators to review progress	Who is in charge?	Resources	When?
1. Balance Curriculum for Excellence so students can fully benefit from a coherent learning experience from 3 to 18 years					
1.1. Re-assess CfE's aspirational vision against emerging trends in education					
1.2. Find a better balance between breadth and depth of learning throughout CfE					
1.3. Adapt the Senior Phase to match the vision of CfE					
1.4. Continue building curricular capacity at various levels of the system using research					
2. Combine effective collaboration with clear roles and responsibilities					
2.1. Ensure stable, purposeful and impactful stakeholder involvement with CfE					
2.2. Revise the division of responsibilities for CfE					
2.3. Structure a coherent communication strategy to support developments of CfE					
3. Consolidate institutional policy processes for effective change					
3.1. Provide dedicated time to lead, plan and support CfE at the school level					
3.2. Simplify policies and institutions for clarity and coherence					
3.3. Align curriculum, qualifications and system evaluation to deliver on the commitment of *Building the Curriculum 5*					
3.4. Develop a systematic approach to curriculum review					
4. Lead the next steps for Curriculum for Excellence with a long-term view					

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Annex A. OECD assessment team members

The following team of OECD and external experts was assembled specifically for the implementation assessment of Scotland's Curriculum for Excellence (CfE):

Dr Beatriz Pont is a Senior Education Policy Analyst at the OECD Directorate for Education and Skills. She leads the OECD Education Policy Implementation team. She has extensive international experience in education policy reform in areas including equity and quality in education, school leadership, adult learning and adult skills. She has worked with countries and jurisdictions, such as Mexico, Norway, Sweden and Wales (United Kingdom), in their school improvement reform efforts. Beatriz holds a PhD from the Complutense University, Madrid and an honorary doctorate from Sheffield Hallam University. She studied Political Science at Pitzer College and holds a Master's degree in International Relations from Columbia University. She has been a research fellow at the Institute of Social Sciences (Tokyo University) and the Laboratory for Interdisciplinary Evaluation of Public Policies (LIEPP, Sciences Po, Paris). She was previously a researcher on education and social policies in the Economic and Social Council of the Government of Spain.

Romane Viennet is a Policy Analyst with the OECD Policy Advice and Implementation division at the OECD's Directorate for Education and Skills. She co-ordinated the OECD implementation assessment of Scotland's CfE and has previously taken part in similar OECD assessments of school education policies in Ireland, Mexico, Norway and Wales (United Kingdom). She holds a Master's degree in International Affairs and a Bachelor of Arts in Political Science and Economics, both from Sciences Po, Paris. She has worked previously as a social impact analyst in France and as a research assistant in behavioural economics projects at Cornell University, New York. Her research interests include education policy implementation and change processes in public policy.

Professor Anne Looney is the Executive Dean of Dublin City University's Institute of Education, Ireland's largest faculty of education. From 2001 until 2016, she was the Chief Executive Officer (CEO) of the National Council for Curriculum and Assessment, the agency responsible for curriculum and assessment for early years, primary and post-primary education in Ireland. She also held the position of Interim CEO at the Higher Education Authority until March 2017. She completed her doctoral studies at the Institute of Education in London. In 2014/2015, she was Professorial Research Fellow at the Institute for Learning Sciences and Teacher Education, based at the Australian Catholic University in Brisbane. Her current research interests include assessment policy and practice, curriculum, teacher identity and professional standards for teachers and teaching. She has also published on religious, moral and civic education, and education policy. She has been a team member for reviews for the OECD on school quality and assessment systems, and is the current president of the International Professional Development Association.

Professor Jan van den Akker is Professor Emeritus at the University of Twente (the Netherlands), where he held a Chair on Curriculum Design and Implementation for many years. Moreover, from 2005 until 2016, he was Director-General of SLO (Netherlands Institute for Curriculum Development), overseeing all curriculum developments in primary and secondary education. Since 2016, he has been acting as an independent curriculum researcher and consultant, building on very broad international experiences in dozens of countries and including various visiting professorships (most recently at the Humboldt University in Berlin). Jan's main areas of expertise include: curriculum policy making (in comparative perspective); curriculum development, in interaction with teacher learning and school development; and methodology of design research in education.

Annex B. Schedule of the OECD visits to Scotland (United Kingdom)

The project ran from July 2020 to April 2021 and was thus subject to travel restrictions imposed by the coronavirus (COVID-19) global pandemic that occurred during that time. As a result, all visits and interviews were conducted online.

Table B.1. First fact-finding virtual visit to Scotland (28 September-2 October 2020)

Date and time (GMT)	Activity/stakeholder
Monday, 28 September 2020 09:00-10:10	**Scottish Education Council Representatives** Local Authority Director of Education and Regional Improvement Collaborative Lead Educational Institute of Scotland School Leaders Scotland General Teaching Council Scotland National Parent Forum Scotland Scottish Qualifications Authority
10:30 -11:15	**Scottish Practitioner Forum Representatives**
11:30-12:40	**Scottish Government Learning Directorate Officials** Director of Learning Deputy Director, Curriculum, Qualifications and Gaelic Deputy Director Improvement, Attainment and Well-being OECD Review National Co-ordinator and Senior Phase Policy Lead
13:40-14:50	**Scottish Qualifications Authority** Chief Executive Director of Qualifications Development
15:10-16:20	**Employers** Vice Chair of the Employer's Forum Co-Chair of Glasgow Developing Young Workforce Regional Group
Tuesday, 29 September 2020 10:00-11:10	**College Representatives** Chief Executive, Colleges Scotland Chief Executive, College Development Network Deputy Director of Skills and Economic Recovery, Scottish Funding Council
11:30-13:00	**Local Authorities** Executive Director of Education and Children's Services, Fife Council and Regional Improvement Collaborative Lead, South East Alliance Deputy Chief Executive and Director of People, South Ayrshire and Regional Improvement Collaborative Lead, South West Collaborative Executive Director of Education and Children's Services, Perth and Kinross and Regional Improvement Collaborative Lead, Tayside Collaborative Director of Children's Services, Shetland and Regional Improvement Collaborative Lead, Northern Alliance Lead Officer for Forth Valley and West Lothian Regional Improvement Collaborative Director of Education, East Renfrewshire and Regional Improvement Collaborative Lead, The West Partnership Director of Children's Services, Renfrewshire Council

Date and time (GMT)	Activity/stakeholder
14:00-15:10	**Education Scotland** Chief Executive Strategic Director, Lifelong Learning Head of Curriculum Innovation Strategic Director for Scrutiny
15:20-16:20	**National Agencies (Skills)** Director of Critical Skills and Occupations, Skills Development Scotland Director of Career Information Advice and Guidance, Skills Development Scotland Chief Executive, Scottish Credit and Qualifications Framework Partnership
Wednesday, 30 September 2020 10:00-10:40	**Community Learning and Development and Youthwork Representatives** Chief Executive, Youthlink Scotland Chair of Community Learning and Development Managers Scotland
10:50-11:30	**Scottish Attainment Challenge/Additional Support Needs Representatives** Senior Regional Advisor, Education Scotland Chair of Additional Support for Learning Advisory Group
11:50-13:00	**Teacher Professional Learning and Leadership Representatives** Chief Executive, General Teaching Council Scotland Director of Education, Registration and Professional Learning Head of Professional Learning and Leadership, Education Scotland Executive Director of Education, Glasgow
14:00-15:10	**Higher Education Representatives** Chair of the Scottish Council of Deans of Education and University of Aberdeen Chair of Universities Scotland's Admissions Policy Group Member of the Commission for Widening Access: Access Delivery Group
15:20-16:30	**Education Researchers** Dr Keir Bloomer, Royal Society of Edinburgh, Education Committee Prof Louise Hayward, Professor of Educational Assessment and Innovation, University of Glasgow Prof Kay Livingston, University of Glasgow Dr Nicola Carse, Edinburgh University and Chair of Scottish Educational Research Association
Thursday, 1 October 2020 10:00-11:10	**Headteacher and Teacher Professional Bodies, Unions and Working Groups (1/2)** Association of Headteachers and Deputes in Scotland Headteacher Royal High School and Chair of the BOCSH Group
11:30-12:40	**Headteacher and Teacher Professional Bodies, Unions and Working Groups (2/2)** General Secretary, Educational Institute of Scotland General Secretary, Scottish Secondary Teachers' Association National Official (Scotland), NASUWT (Scotland) General Secretary, School Leaders Scotland
13:40-14:40	**Parent Organisations** Chief Executive Officer, Connect Vice Chair, National Parent Forum Scotland
15:00-16:00	**Learners and Young Person Organisations** Smart Services Director, Young Scot Joint Head of Children's Parliament Chief Executive of Children in Scotland Chief Executive of the Scottish Youth Parliament
Friday, 2 October 2020 10:00-11:30	**Curriculum and Assessment Board** Headteacher, Harrysmuir Learning Community, West Lothian Head of Humanities, Care and Services, Scottish Qualifications Authority University of Stirling Renfrewshire Council Chair of the ADES Curriculum Network Chief Executive Education Scotland Strategic Director, Lifelong Learning, Education Scotland Chief Executive Scottish Credit and Qualifications Framework Chair National Parent Forum Scotland Locality Manager, Clydesdale South Lanarkshire Council, Education Resources Assistant Secretary the Educational Institute of Scotland Senior Director of Service Development and Delivery, Skills Development Scotland

Date and time (GMT)	Activity/stakeholder
	Director of Service Design and Innovation Skills Development Scotland National Executive Member, NASUWT Scotland Director Scottish Council of Independent Schools Assistant General Secretary Scottish Secondary Teachers' Association Deputy Associate Principal, University of Strathclyde
11:45-13:00	**Scottish Parliament Education and Skills Committee** Clare Adamson MSP (Convener) Daniel Johnson MSP (Deputy Convener) Alasdair Allan MSP Kenneth Gibson MSP Iain Gray MSP Jamie Greene MSP Ross Greer MSP Jamie Halcro Johnston MSP Rona Mackay MSP Beatrice Wishart MSP Five Parliament officials
14:00-15:00	**Gaelic Education Groups** Director of Education, Bòrd na Gàidhlig Chair, Stòrlann Nàiseanta Parental Officer, Comann nam Pàrant Chief Executive, Fèisean nan Gàidheal
15:20-16:20	**Subject-Specific Interest Groups** Arts and Learning Manager, Edinburgh City Council Senior Education Officer for Health and Well-being, Education Scotland Chair, Scottish Association of Language Teachers ADES Representative, National Profile Raising Group Senior Education Officer for Religious and Moral Education STEM Representative, Institute of Physics Representative from Royal Geographical Society of Scotland Representative from Technology Teachers Association

Table B.2. Second fact-finding virtual visit to Scotland (2-5 November 2020)

Date and time (GMT)	Activity/stakeholder
Monday, 2 November 2020	**Meeting with Colleges, Employers and Community Learning and Development Representatives**
09:30-10:45	Principal, Forth Valley College
	Principal and Chief Executive, West Highland College (University of the Highlands and Islands)
	Community Benefit Co-ordinator, CCG Construction Group
	HR Manager, CCG Construction Group
	Community Learning and Development, Curriculum Lead, KEAR Campus School
13.00-16.10	**Virtual Visit to Forehill Primary School, South Ayrshire, including meetings with**
13:00-13:30	Headteacher and Senior Management Team
13:40-14:10	Teachers
14:20-14:50	Primary 6 Learners
15:00-15:30	Primary 7 Learners
15:40-16.10	Parent Group
Tuesday, 3 November	
09:30-12:30	**Virtual visit to Tiree High School and Oban High School, including meetings with**
09:30-10:00	Headteacher and Senior Leadership Team
10:10-10:40	Teachers
10:50-11-20	Parents' Council
11:30-12:00	Broad General Education Learners
12:10-12:40	Senior Phase Learners
13:30-14:45	**Focus Group Meeting with National Parents Organisations**
	Parents nominated by National Parent Forum Scotland and Connect
Wednesday, 4 November	
09:30-12:30	**Virtual Visit to Castlemilk High School, Glasgow, including meetings with**
09:30-10:00	Headteacher and Senior Leadership Team
10:10-10:40	Teachers
10:50-11:20	Parent Group
11:30-12:00	Broad General Education Learners
12:10-12:40	Senior Phase Learners
13:30-14:45	**Focus Group Meeting with School-age Learners from**
	Calderglen High School, South Lanarkshire
	Grove Academy, Dundee
	Stewarton Academy, East Ayrshire
15:00-16:30	**Focus Group Meeting with Headteachers from**
	Newbattle High School, Midlothian
	Portlethen Academy, Aberdeenshire
	Duncanrig Secondary School, South Lanarkshire
	Hazelhead Primary School, Aberdeen
	E-Sgoil
Thursday, 5 November 2020	
09:00-12:10	**Virtual Visit to Aberdeen Grammar School, including meetings with**
09:00-09:30	Headteacher and Senior Management Team
09:40-10:10	Broad General Education Learners
10:20-10:50	Parents
10:50-11:20	Teachers
11:30-12:00	Senior Phase Learners
13:00-14:15	**Focus Group Meeting with Teachers from**
	Belmont Academy, South Ayrshire
	Earlston High School, Scottish Borders
	Hillhead High School Glasgow
	Inveralmond Community High School
	Grange Primary, Angus
	Gartocharn Primary, West Dunbartonshire
	Principal Teacher and Pedagogy Group Lead, West Lothian Inclusion Service
	Calderglen High School, South Lanarkshire

14:30-15.45	**Focus Group Meeting with Post-school Learners** 4 university students 2 college students 2 post-school learners involved in youth work

Table B.3. Additional meetings (2020)

Date and time (GMT)	Activity/stakeholder
Tuesday, 13 October 16:30-17:30	Professor Mark Priestley, University of Stirling
Friday, 13 November 10:00-11:00	Professor Chris Chapman, University of Glasgow
Tuesday, 24 November 17:00-18:00	Professor Graham Donaldson, University of Glasgow
Monday, 30 November 15:30-16:30	Professor Andrew Hargreaves

Table B.4. Stakeholder consultation event to discuss OECD preliminary findings (16 March 2021)

Time (GMT)	Activity	
12:45-13:00	Signing up to the online event	
13:00-13:05	Welcome	Presentation of the agenda of the day by the OECD team
13:05-13:30	Preliminary Draft Findings and Recommendations	Presentation by the OECD team
13:30-13:50	Questions and Answers with the Participants	
13:50-14:20	Working Session #1	Group discussion about one of the preliminary drafts OECD findings
14:30-15:00	Working Session #2	Group discussion about one of the preliminary drafts OECD findings
15:00-15:30	Plenary Session and Wrap-up	Groups report back to plenary OECD wrap-up

Implementing Education Policies

Scotland's Curriculum for Excellence

INTO THE FUTURE

Students in Scotland (United Kingdom) engage in learning through *Curriculum for Excellence* (CfE), which aims to provide them with a holistic, coherent, and future-oriented approach to learning between the ages of 3 and 18. CfE offers an inspiring and widely supported philosophy of education. Schools design their own curriculum based on a common framework which allows for effective curricular practices. In 2020, Scotland invited the OECD to assess the implementation of CfE in primary and secondary schools to understand how school curricula have been designed and implemented in recent years. This report analyses the progress made with CfE since 2015, building upon several months of observations in Scotland, the existing literature and experiences from other OECD countries. The OECD analysis and recommendations aim to support Scotland as it further enhances CfE to achieve its potential for the present and future of its learners. Just as Scotland's *Curriculum for Excellence* was among the pioneers of 21st century learning, its most recent developments hold valuable lessons for other education systems and their own curriculum policies.

PRINT ISBN 978-92-64-34104-3
PDF ISBN 978-92-64-47698-1