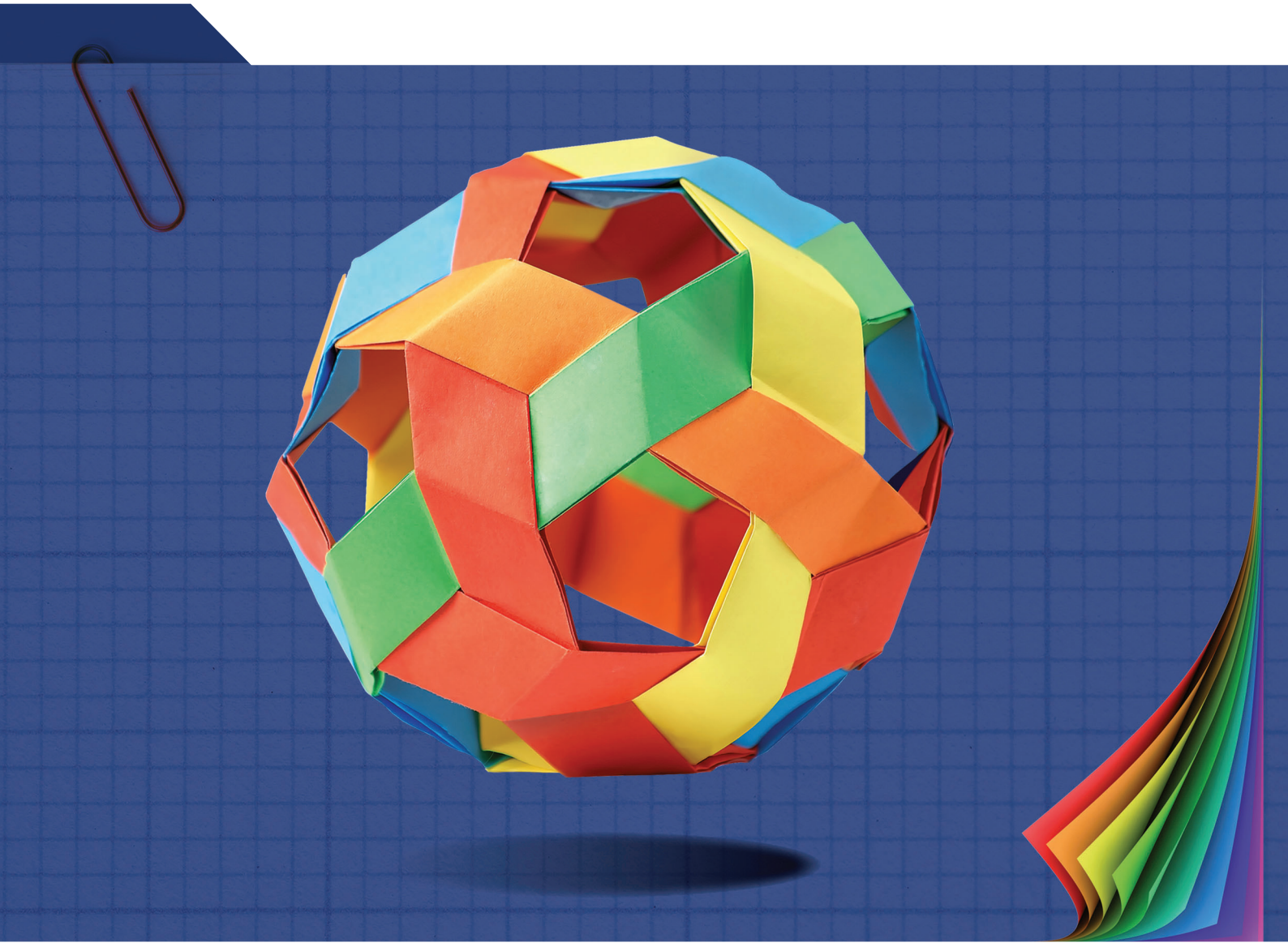
Implementing Education Policies

Achieving the New Curriculum for Wales



OECD

Implementing Education Policies

Achieving the New Curriculum for Wales

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Note by Turkey
The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union
The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

Please cite this publication as:
OECD (2020), *Achieving the New Curriculum for Wales*, Implementing Education Policies, OECD Publishing, Paris, *https://doi.org/10.1787/4b483953-en*.

ISBN 978-92-64-55038-4 (print)
ISBN 978-92-64-53801-6 (pdf)

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

Photo credits: Cover © Denisfilm / iStock, © optimarc / Shutterstock, © koya979 / Shutterstock.

Corrigenda to publications may be found on line at: *www.oecd.org/about/publishing/corrigenda.htm*.

© OECD 2020

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at *http://www.oecd.org/termsandconditions*.

Foreword

In 2014, Wales (United Kingdom) set out to reform its education system. A curriculum reform for children aged 3 to 16 leads this long-term agenda, which was developed following a consultation across Wales on the objectives for the future of its education system. The goal of the Welsh reform journey is that its education will help children and young people in Wales become ambitious, capable learners, ready to learn through their lives; enterprising, creative contributors, ready to play a full part in life and work; ethical, informed citizens of Wales and the world; healthy, confident individuals, ready to lead fulfilling lives as valued members of society. In a nutshell, Wales aims to prepare its youth to thrive in the 21st century.

In this endeavour for future readiness, getting the curriculum right is crucial for Wales, given its implications for learning. Understood as a course or plan for learning, the curriculum shapes what and how learners learn in school. Systems worldwide are coming together with help from international organisations such as the OECD, to seek principles for future-oriented curricula that aspire to the highest international standards of quality in education, while also responding to national and local challenges. In a century characterised by complexity and uncertainty, determining what one needs to learn today in order to thrive into tomorrow is the test posed to students, educators and policy makers internationally, and the challenge that Wales has started to tackle.

The Curriculum for Wales is a national curriculum framework motivated by Wales' vision of a holistic education, respectful of learners' well-being, and grounded in a renewed confidence in educators' professionalism. Under co-construction since 2015 with stakeholders from across the Welsh system, the national framework implies a greater involvement of schools and local communities in the design and realisation of their own curricula, and a strong provision of school support from system leaders.

As Wales moved from its review and national consultation on the curriculum and assessment arrangements, to the development of the new Curriculum for Wales, the question of implementation (or realisation, as often referred to in Wales) of the curriculum was always prominent. The road of education reform is littered with good ideas that were poorly implemented, and developing a curriculum policy with implementation in mind is the first step toward its successful realisation. The Welsh Government recognised the implementation challenge and turned to the OECD for support to review the progress made and suggest next steps for success in the realisation of the Curriculum for Wales. 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 presents the main findings of the assessment of the progress made in the development and early implementation of the Curriculum for Wales between 2016 and 2019. In response to the Welsh Government's request, it offers suggestions on how to approach the next steps to succeed in curriculum realisation. It suggests that Wales is on the path to transform the way its youth learns and progresses in

schools, but that there are some actions the country must take in order to turn the new curriculum into reality for every learner. The report especially emphasises the importance of providing continuous support to schools and helping key actors develop a deep understanding and the relevant skillset for the curriculum, which will require further collaboration and co-ordination between stakeholders. It will also be crucial for Wales to clarify both the vision and the practical implications of the new curriculum for schools, and to align all complementary policy initiatives to the curriculum.

The report builds on the analysis of a wide range of documentation, visits and interviews with stakeholders from across Wales, more than 6 years of collaboration between Wales and the OECD, and international experience and best practices from OECD countries. We trust that the present report will not only help Wales on the road to successful curriculum realisation, but other education systems as well, which might learn from the Welsh experience and from the evidence collected from the literature and other countries' examples.

Andreas Schleicher
Special Advisor on Education Policy to the Secretary-General
Director for Education and Skills

Note

This report was completed in February 2020. The analysis presented does not consider any potential effects of the COVID-19 epidemic and how they may have affected education systems.

Acknowledgements

This assessment was commissioned by Kirsty Williams AM, Minister for Education in the Welsh Government. The OECD team is indebted to Ms Williams for her support and engagement throughout the assessment process, to Tom Woodward, Special Advisor to the Minister for Education, and Dewi Knight, Specialist Advisor for Education Reform, for their help, and to the Welsh Government, under the leadership of its Education Directorate, for facilitating the assessment. We are grateful for the invaluable support, contributions and guidance of Steve Davies, Director of Education, and of the Education Directorate's staff. In particular, the team would like to thank Joanne Davies, Professional Learning Policy Lead and Lisa Clarke, Professional Learning Programme Lead, for co-ordinating the process.

The assessment benefitted from the contributions of the officials and education experts from the Education Directorate and beyond, who shared their knowledge with the OECD team during the assessment and provided feedback on this report. We would like to thank in particular the Education Directorate's Deputy Directors, including Kevin Palmer, Pedagogy, Leadership and Professional Learning, Claire Bennett, Curriculum and Assessment, Mel Godfrey, Education Business Planning and Governance, Huw Owen, School Effectiveness, and Ruth Conway, Support for Learners. We would also like to acknowledge the valuable contributions and feedback provided by the members of the Strategic Education Delivery Group, as well as by the Welsh Minister for Education's advisors. Special thanks go to Professor Graham Donaldson for sharing his insights and providing guidance to the OECD team throughout the assessment.

The OECD team thanks all the participants in the assessment visits (Annex B), starting with the head teachers, teachers, staff, students and parents of the schools who warmly welcomed us and made time to meet with us even during a busy school year. We are also grateful for the contributions of officials from public agencies – including Her Majesty's Inspectorate of Education and Training (Estyn), the National Academy for Educational Leadership (NAEL), and Qualifications Wales. We thank the scholars, researchers, non-governmental organisations, unions and professional associations, and all the entities and individuals who kindly shared their views, experience and knowledge with us. The courtesy and hospitality extended to us throughout our stays in Wales always made our task as enjoyable as they were challenging.

The OECD team who conducted the assessment and authored this report was composed of Beatriz Pont, Senior Policy Analyst at the OECD, Romane Viennet, Policy Consultant at the OECD, and Claire Sinnema, Associate Professor of the University of Auckland (Annex A). The OECD team acknowledges the support from the OECD Secretariat, and especially 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-Galvan, Pierre Gouëdard and Pinhsuan Huang, of the Directorate for Education and Skills, who provided in-depth feedback and advice 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 Mimi Trentin, Claire Berthelier and Sara Gouveia, who helped throughout the process; and by Rachel Linden, who organised the publication process. Special thanks go

to Marco Kools, previously of the Directorate for Education and Skills, and now at the United Nations Children's Fund (UNICEF) offices in Laos, for his continued support and precious contributions.

Table of contents

Foreword 3

Acknowledgements 5

Acronyms and abbreviations 11

Executive Summary 13

1 Introduction 17
- The education system in Wales 18
- A new curriculum to transform education in Wales 20
- Methodology of the assessment 22
- References 25

2 Designing the Curriculum for Wales 27
- Why a new curriculum? 28
- An overview of the Curriculum for Wales 30
- Observations and issues about the curriculum 33
- Conclusions 50
- Notes 51
- References 52

3 Building on a strong co-construction process 61
- Why co-constructing the curriculum? 62
- An overview of the roles and responsibilities in the Curriculum for Wales 62
- Observations and issues in co-construction 66
- Conclusions 75
- References 77

4 Ensuring a conducive policy context 81
- Why is having a conducive context important? 82
- An overview of contextual features 83
- Observations and issues on the policy context 83

Conclusions 93
References 95

5 Revising the implementation strategy from a school's perspective 99
Why is it important to review the implementation strategy of the Curriculum for Wales? 100
Overview of the current implementation strategy for the curriculum 101
Next steps for the implementation strategy: adopting a school's perspective 103
References 111

Annex A. OECD team and authors of the report 113

Annex B. Schedule of the OECD visits to Wales 114

Tables

Table 3.1. Key stakeholders in Wales' curriculum reform 62
Table 4.1. Profiles of the four regional consortia in Wales, 2016 84
Table 5.1. Planning the next steps for implementing the Curriculum for Wales 110

Table A B.1. First fact-finding visit to Wales (12-15 September 2019) 114
Table A B.2. Second fact-finding visit to Wales (6-11 October 2019) 114
Table A B.3. Additional telephone interviews 115

Figures

Figure 1.1. Student reading performance and equity in education in Wales, PISA 2018 19
Figure 1.2. The Welsh education reform: new curriculum and "enabling objectives" 21
Figure 2.1. Reading performance of 15-year-olds, Wales and OECD, PISA 2006-2018 28
Figure 2.2. Student performance in reading, mathematics and science in Wales, PISA 2006-2018 29
Figure 3.1. Wales' three-tier model in education policy 64
Figure 3.2. Dimensions of schools as learning organisations in Wales, 2018 67
Figure 3.3. The Welsh education reform's governance structure 71
Figure 3.4. Motivations to become a teacher, TALIS 2018 74

Boxes

Box 1.1. Implementing policies: supporting change in education 23
Box 2.1. The six Areas of Learning and Experience of the Curriculum for Wales 31
Box 2.2. Schools at the centre of curriculum development 33
Box 2.3. Curricula for the 21st century 36
Box 2.4. Assessment for learning in New Zealand 39
Box 2.5. Guaranteeing quality and coherence among local curricula in Finland 42

Follow OECD Publications on:

http://twitter.com/OECD_Pubs

http://www.facebook.com/OECDPublications

http://www.linkedin.com/groups/OECD-Publications-4645871

http://www.youtube.com/oecdilibrary

http://www.oecd.org/oecddirect/

This book has...

StatLinks

A service that delivers Excel® files from the printed page!

Look for the *StatLinks* at the bottom of the tables or graphs in this book. To download the matching Excel® spreadsheet, just type the link into your Internet browser, starting with the *https://doi.org* prefix, or click on the link from the e-book edition.

Acronyms and abbreviations

ALN	Additional learning needs
AoLEs	Areas of Learning and Experience
CSC	Central South Consortium (Central South Wales regional consortium)
EAS	Education Achievement Service (South East Wales regional consortium)
ERW	Ein Rhanbarth ar Waith (South West and Mid Wales regional consortium)
EWC	Education Workforce Council
FSM	Free school meals
GCSE	General Certificate of Secondary Education
GwE	Gwasanaeth Effeithiolrwydd (North Wales regional consortium)
Inset	In-service Training
ITE	Initial teacher education
NAEL	National Academy for Educational Leadership
NAPL	National Approach to Professional Learning
NPQH	National Professional Qualification for Headship
NSERE	National Strategy for Educational Research and Enquiry
PISA	Programme for International Student Assessment
PL	Professional Learning
QTS	Qualified Teacher Status
SLO	Schools as Learning Organisations

Executive Summary

Introduction

The Curriculum for Wales is the cornerstone of Wales' efforts to shape an education system led by commonly defined, learner-centred purposes. The curriculum is embedded in *Education in Wales: Our National Mission*, an action plan for 2017-21 that falls in line with the Welsh vision for its education system. This vision calls for all children and young people to achieve the four purposes of becoming:

- ambitious, capable learners who are ready to learn throughout their lives
- enterprising, creative contributors who are ready to play a full part in life and work
- ethical, informed citizens who are ready to be citizens of Wales and the world
- healthy, confident individuals who are ready to lead fulfilling lives as valued members of society.

Wales' complete reform agenda encompasses five policy areas: curriculum; assessment and evaluation; equity, excellence and well-being; teaching; and leadership. The new curriculum builds around the "four purposes" of education and around "statements of what matters", which describe the big ideas of learning – what is essential for students to learn. It aims to promote holistic learning, for which it is structured around six broad Areas of Learning and Experience with three cross-cutting competencies (literacy, numeracy and digital competency). Progression of learning is acknowledged as a continuum rather than a succession of key standard stages. Schools are given autonomy within a clear national framework to adapt their curriculum to local needs and to enhance teacher professionalism.

The Welsh Government invited the OECD, through its Implementing Education Policies support programme, to provide an assessment of the implementation of the new Curriculum for Wales, review Wales' readiness to implement the new policy, and suggest the next steps for implementation. A specific OECD team gathered for the assessment (Annex A) and built upon years of work on Welsh education policies, undertook study visits (Annex B), performed the analysis and developed a set of recommendations presented in this report.

Ready for the Curriculum for Wales?

Designing the new Curriculum for Wales

Wales has successfully mapped out its policy plan to move away from what had become a highly prescriptive national curriculum, to one that focuses on the future, is adapted to learners' diverse needs and puts the teachers and principals back into positions of leaders of learning and teaching. The policy vision is clear and looks to the long term. The new curriculum framework aspires to best practices in terms

of 21st century learning, and gives high levels of agency for all stakeholders. The curriculum reform was developed as part of a wider reform agenda including key complementary policies for its implementation. The Welsh Government and other system leaders have started developing initiatives to support schools with curriculum implementation.

The challenge for Wales at this stage is to remain true to the vision while shifting the perspective of the strategy from being policy-driven to one focused on schools. To ensure the intentions of the new curriculum translate into practice, it is essential for Wales to address several issues, including a lack of deep understanding of what successful realisation of the curriculum might look like in practice, challenges for schools to design their own curriculum, and implications in terms of developing specific capabilities. There is a risk of inequalities increasing due to the challenges that disadvantaged schools can have in implementing the curriculum, which accentuates the need for clarifying resources available for schools.

Building on a strong co-construction process

Wales' commitment to co-construction has laid a strong foundation for the new curriculum to take root and flourish. Stakeholders throughout the education system are strong advocates for co-construction. Considerable progress has been achieved in dialoguing, collaborating and building trust. Wales should be acknowledged for its efforts to embed co-construction across the system. Wales has also invested in having a clear communication strategy that has ensured progress on developing coherence between the different policy components, and clarity on the vision, establishing a strong basis for education professionals to make the "national mission" their own.

Challenges arise as the process unfolds and the middle tier and schools turn to local design and implementation. As stakeholders' roles evolve, there is a need to review functions and responsibilities, in order to co-ordinate better the system's effort and to clarify what the next stages of the process look like from a school's perspective. Efforts will be needed to help all schools develop the mind-set, skills, capabilities and resources to implement the new curriculum.

Ensuring a conducive policy context

Wales initiated a shift from what had become a managerial education system to one based on trust and professionalism, which can build on a favourable political and policy environment: governance processes are aligning in support of the curriculum, and many complementary policies are evolving in the same direction. Acknowledging research and previous OECD recommendations, Wales made considerable efforts to bring coherence to its education reform journey, pursuing the curriculum reform at the same time as four additional complementary policies, which include policies to improve the quality and leadership of education professionals, the assessment, evaluation and accountability framework, and equity and well-being across the system. The school improvement infrastructure has been consolidated with local authorities and regional consortia providing school improvement services and supporting schools.

For the curriculum to be effective across all schools in Wales, further coherence of these complementary policies with the curriculum needs to be ensured, as there are risks that these may go in different directions and hamper progress with the Curriculum for Wales realisation in schools. This is the case in terms of the lack of clarity around the accountability framework and the school-leaving qualifications, which risk that misaligned accountability and assessment measures could undermine the curriculum.

Next steps for the implementation strategy: adopting a school's perspective

Wales has made considerable progress with its current implementation strategy and action plan. It is important to show continuity on this reform journey while acknowledging that the next steps of implementation have to place schools and their communities at the centre. Taking a school's perspective implies holding the vision steady and maintaining the objectives defined in *Education in Wales: Our National Mission*, while making sure there is a shared understanding of what that vision looks like in practice. The next steps of the implementation strategy should prioritise the actions based on what the system, and more specifically schools, need to roll out the new curriculum successfully from 2022. This school's perspective should guide all the suggestions that follow. For the new curriculum to be implemented effectively, the OECD team proposes the following recommendations and actions:

Developing a shared understanding of what the vision looks like in practice

- Develop a shared overarching vision of what the curriculum implies for practice in schools.
- Define associated operational objectives and indicators to monitor progress towards achieving the vision including the implementation of the curriculum.

Supporting the realisation of the curriculum across all schools in Wales

- Organise expert groups that can review the Curriculum for Wales building on the existing framework to ensure that it is internally coherent, well-designed and that it supports depth of understanding; and to consider assessment for learning approaches that are aligned and can gauge student progress.
- Develop knowledge, materials and space for the local and school level to be able to understand and collectively design their own curriculum reflecting the aspirations of the framework.
- Invest in the development of education professionals' capacity to be the main drivers of the curriculum in schools by enhancing their skills and competencies and promoting their collaboration.
- Prioritise equity considerations in provision of professional learning, school improvement services and resourcing to avoid risks of inequalities increasing with curriculum realisation.

Focusing the co-construction process on next steps for schools

- Clarify and ensure a shared understanding of each stakeholder's revised roles, responsibilities and concrete next steps in the curriculum realisation.
- Sustain the co-construction process over the medium term through system leadership and continued investment in consultation and engagement approaches that have been successful in developing shared ownership of actions and trust.
- Continue with the clear and targeted communication strategy, which can contribute to ensuring alignment, shared purpose and dissemination of knowledge and good practices across Wales.
- Support readiness for change across all schools in Wales by developing collaborative networks that leverage curriculum expertise and resources, with participation from practitioners, Pioneer schools, curriculum and assessment experts, and relevant university experts.

Consolidating policy coherence around schools

- Continue to develop the role of regional consortia by enhancing the school improvement service infrastructure, investing in professionals working in consortia across Wales, and guaranteeing alignment in implementation between the curriculum and other policies, including the Additional Learning Needs (ALN) Act.
- Set learning about the new curriculum at the core of the Schools as Learning Organisations (SLO) model for the coming years.
- Continuously evaluate policy coherence across (potentially) complementary policies, especially in terms of professional standards and leadership.
- Consolidate an evaluation and assessment framework (including qualifications, accountability, system and school evaluations) and develop a systematic and robust research agenda that align to the new curriculum.

1 Introduction

This chapter presents an overview of the Welsh education system and introduces the background to the development of the new curriculum to be implemented in schools across Wales. It then describes the purpose of this report, which follows an invitation by the Welsh Government to the OECD to assess the progress made in advancing the curriculum reform and to suggest ways to move forward with its implementation. It concludes with a description of the methodology of the OECD assessment.

The education system in Wales

Wales is a country of the United Kingdom with a population of 3.1 million in 2016, or about 5% of the United Kingdom population (Office for National Statistics, 2019[1]). As in the United Kingdom overall, the population is ageing, and Wales is the only nation in the United Kingdom where child poverty was on the rise from previous years, reaching 29% in 2019 and resulting in an increase in the percentage of students eligible for free school meals (18.3%) (Welsh Government, 2019[2]; Welsh Government, 2019[3]). The country is officially bilingual in English and Welsh. In 2019, almost 30% of the population spoke Welsh and 16.5% reported using Welsh every day (Welsh Government, 2019[4]). Wales has a challenging geography, and most urban areas are located in the southern local authorities of Cardiff, Swansea and Newport. Although the United Kingdom is a unitary entity and a sovereign state, Wales has a form of autonomous government similar to Scotland and Northern Ireland, with a legislative body (the Welsh National Assembly) and a Welsh Government who operate in over 20 policy areas including economic development, health, social welfare, and education and training.

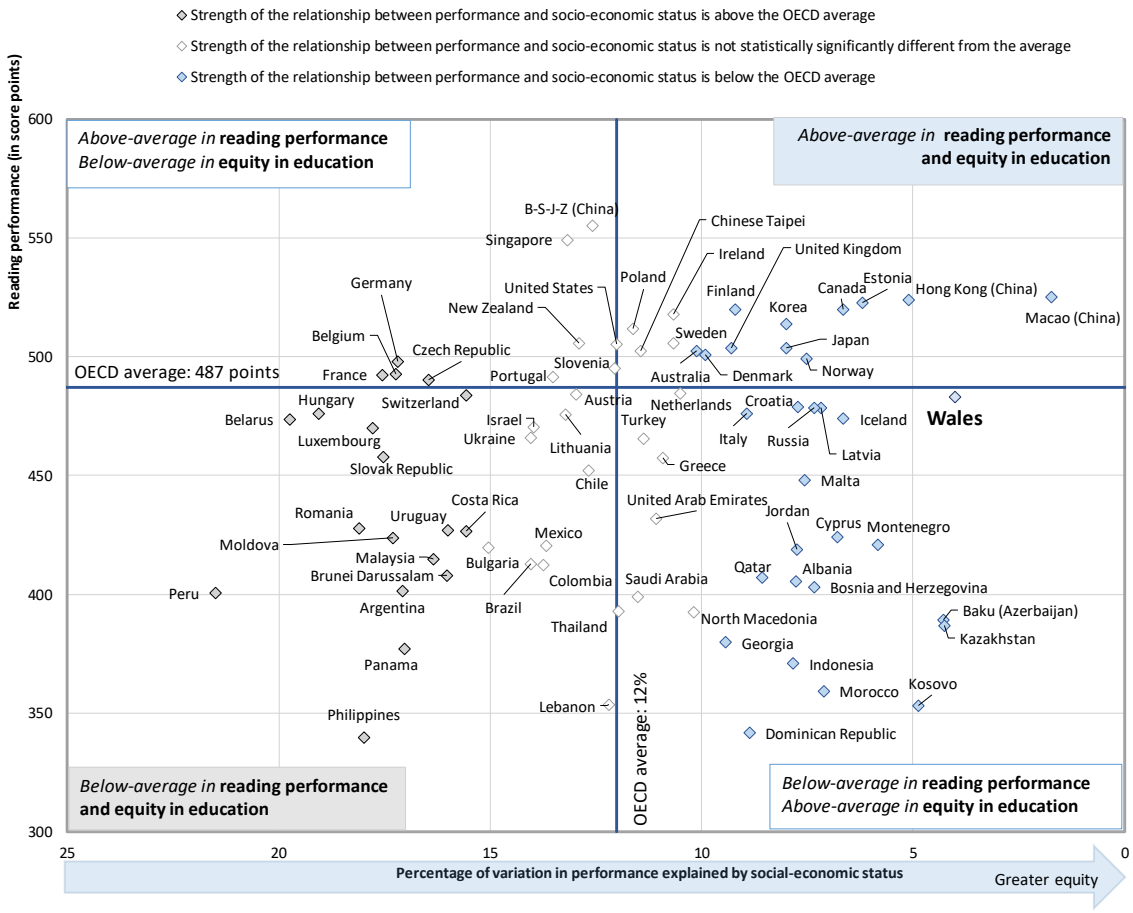
The Welsh Government leads the public education system through its Education Directorate. Across Wales, the 22 local authorities have significant responsibilities in the operation of education, including for funding allocation decisions. Education in Wales implies numerous other actors including four regional consortia for school improvement, Her Majesty's Inspectorate for Education and Training in Wales (Estyn), arms-length agencies such as the National Academy for Educational Leadership, regulatory bodies such as the Education Workforce Council and Qualifications Wales, and social partners among trade and business unions. The committed education workforce counts 25 802 qualified teachers in service (23 593 full time equivalent) – of which 3 656 also held a school leadership position – and 27 101 support staff (23 251 full-time equivalent), of which half are teacher assistants (Welsh Government, 2019[3]).

Education is compulsory in Wales from the age of 5 to 16 and aims to respond to the need of a diverse student population. Around 98% of children begin their education at 4 and 80% continue beyond 16 (OECD, 2018[5]). Wales' public education system caters to approximately 468 000 students in 1 494 public schools and educational settings in nursery (age five), primary, secondary and special education, and to an additional 10 000 students in 75 independent schools. All schools teach both English and Welsh, but around 30% teach primarily in the Welsh medium, corresponding to 23% of the student body (Welsh Government, 2019[3]). In Wales, some learners are educated in learning environments such as publicly funded non-maintained nursery settings, "Pupil Referral Units" and "Education Other Than School" provision modes, which is why Wales' stakeholders refer to them as "schools and educational settings". In this report, for the purpose of clarity and to facilitate comparison with other education systems, all these settings will be referred as "schools".

Although Wales scored below OECD averages in the Programme for International Student Assessment (PISA) results since 2006, the 2018 results showed an improvement in the literacy, numeracy and science levels of its 15 year old students (OECD, 2019[6]; OECD, 2016[7]; OECD, 2014[8]; OECD, 2010[9]; OECD, 2007[10])). National tests also showed slight student progress since 2014, even if recent changes in the way student performance is measured do not allow for comparison from 2017 onwards. In 2016/17, close to 55% of students in Year 11 achieved the Level 2 threshold in each of the core subjects meaning that these students achieved GCSE at grades A*-C in English or Welsh language and mathematics. This translated to roughly 1.8 percentage points higher than the previous year under the former system (Welsh Government, 2016[11]). PISA and national standardised test results are conventionally used in many OECD countries, although it must be noted they only measure certain aspects of an education system's performance.

Inequity in the Welsh system is around the average according to PISA data (OECD, 2016[7]). In 2018, less disadvantaged students scored on average 49 points higher in reading than more disadvantaged students, a significantly smaller gap than the OECD average (89 points) (Sizmur et al., 2019[12]). Figure 1.1 compares jurisdictions who participated in PISA 2018 in terms of reading performance and equity in education: Wales is slightly below average in reading, but significantly above average in equity. Equity remains a concern, however, in Welsh education policy (Welsh Government, 2017[13]).

Figure 1.1. Student reading performance and equity in education in Wales, PISA 2018



Note: Equity is measured by the strength of the relationship between performance and socio-economic status. Socio-economic status is measured by the PISA index of economic, social and cultural status. Information on statistical data for Israel:http://dx.doi.org/10.1787/888932315602
Source: OECD (2019[14]) PISA 2018 Results (Volume II), Table II.B1.2.3 and Table II.B2.26

StatLink https://dx.doi.org/10.1787/888934084361

The Welsh education system has been on a reform journey towards school improvement, following PISA and other international and national data on school performance, and selected OECD reviews. The Welsh Government consistently acknowledged OECD analysis and followed the subsequent suggestions made by the Organisation. Since 2014, the Welsh Government has been investing in developing and refining its education improvement strategies.

This report aims to contribute to the Welsh reform journey. It is focused on the new Curriculum for Wales and its implementation and aims to provide an assessment of progress made and next steps towards its successful implementation. As most of the data collection and analysis was conducted before the final version of the curriculum guidance documents was published, some of the considerations and issues raised in this report were, therefore, in the process of being addressed at the time it went to press.

A new curriculum to transform education in Wales

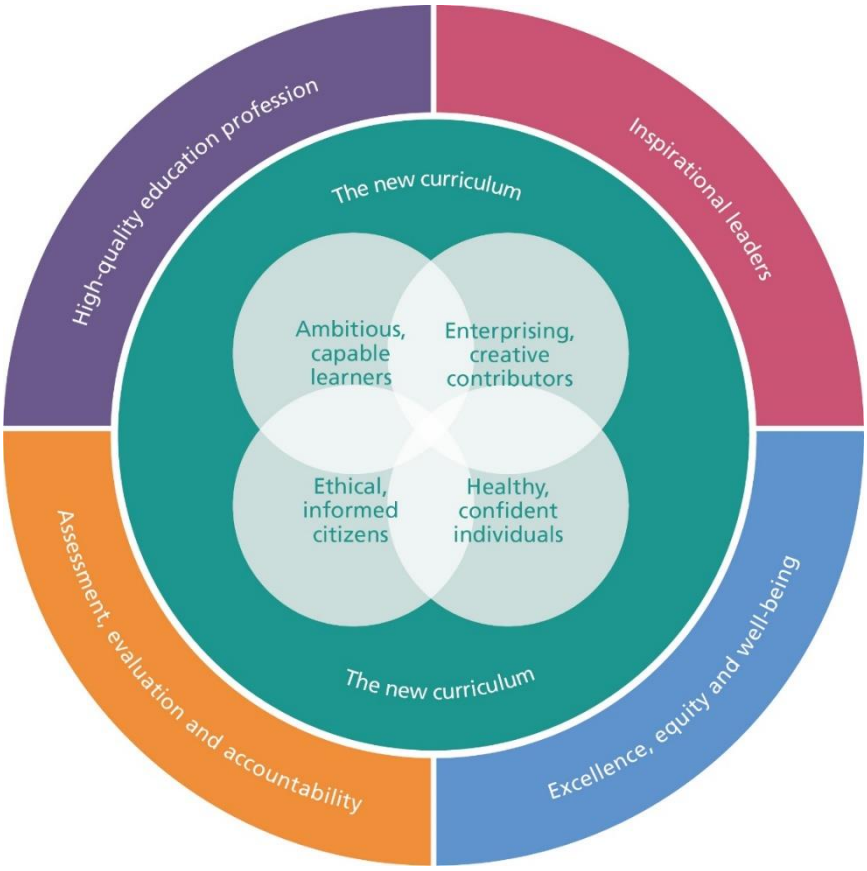
The new curriculum for Wales is the cornerstone of the country's efforts to turn its education system from a performance-driven education with a narrow focus, to an education led by commonly defined, learner-centred purposes. Since 2014, the Welsh Government has been investing in developing and refining its education improvement strategies. Building on the OECD review and other research reports (Hill, 2013[15]; Estyn, 2014[16]; OECD, 2014[17]), the Welsh Government introduced their *Qualified for Life: An Education Improvement Plan for 3 to 19 Year Olds in Wales* (Welsh Government, 2014[18]). The plan outlined the actions it would take for the next five years to improve educational attainment for all learners in Wales. It then initiated an independent review of its national curriculum and assessment to define the principles for a new curriculum, which resulted in the definition of the four purposes for the education system (Donaldson, 2015[19]). In 2015, it published a new action plan: *Qualified for Life - A curriculum for Wales-a curriculum for life* (Welsh Government, 2015[20]). In 2016, following a change in government, the OECD was invited to undertake an assessment of Wales' education reforms, and provided feedback on progress made since 2014. The report, *The Welsh Education Reform Journey*, offered recommendations to inform the next steps of the reform process (OECD, 2017[21]).

Against this backdrop, Wales renewed its action plan in 2017 and turned the transformation of the education system into what it termed its "national mission", in which all Welsh stakeholders were responsible for co-constructing educational improvement. The "national mission" intends to raise school standards, reduce the attainment gap between different groups of learners and ensure an education that is a source of national pride and public confidence (Welsh Government, 2017[13]). The action plan for 2017-21 (*Education in Wales: Our national mission*) presented the Welsh vision for education and called for all children and young people to achieve the four purposes of becoming:

- ambitious, capable learners who are ready to learn throughout their lives
- enterprising, creative contributors who are ready to play a full part in life and work
- ethical, informed citizens who are ready to be citizens of Wales and the world
- healthy, confident individuals who are ready to lead fulfilling lives as valued members of society.

Wales' complete reform agenda encompasses five policy areas: curriculum; assessment and evaluation; equity, excellence and well-being; teaching; and leadership. Following expert assessments, consultations with the educational profession, and national discussions about education, curriculum reform became the spearhead of this reform journey, bringing coherence to the reform agenda. Each of the other policy areas – "enabling objectives", as referred to in Wales – includes key policy tools to help turn the new curriculum framework into reality. Figure 1.2 displays a visual used by the Welsh Government to communicate the logic of the reform agenda. The action plan also calls for all schools to develop into learning organisations, which can more easily adapt to change.

Figure 1.2. The Welsh education reform: new curriculum and "enabling objectives"



Source: Welsh Government (2017[13]), *Our National Mission – Action plan 2017-21*, https://gov.wales/sites/default/files/publications/2018-03/education-in-wales-our-national-mission.pdf.

The Curriculum for Wales aims to cater better to the needs of Welsh learners in the 21st century, which implies significant changes from the curriculum currently used in schools. It covers all levels of education for children aged 3 to 16 in maintained (public) school settings. The new curriculum consists of a framework established at the national level for the curriculum and student assessment arrangements, but the enacted curriculum will depend on specific design and planning at school level. For this report's purposes, "curriculum framework" and "assessment arrangements" refer to the sets of guidelines and documentation offered for public feedback in April 2019 and published in their final version in January 2020, which provide the overarching framework within which schools will develop their own local curricula.

Giving some autonomy for schools to adapt their curriculum within a clear national framework is one of the key principles of the proposed curriculum. The curriculum framework therefore sets the national requirements and principles of high-quality learning for all schools to respect, and provides some supporting guidance. It leaves, however, some considerable margins for schools to decide many aspects of their learners' experience with respect for these principles, including selection of content, structure of subjects and areas of learning, timetables, and time for professional collaboration. This autonomy is to be understood as the recognition that school leaders, practitioners and schools' governing bodies are the most relevant actors to assess their students' needs and choose topics and activities of learning and assessment

that best support their learning (Welsh Government, 2020[22]). Another key principle is that the curriculum is built around the "four purposes" of education and around the "statements of what matters" which describe what is essential for students to learn. Learning is structured to promote holistic learning, with six Areas of Learning and Experience (Areas) integrating several topic subjects, and three key competencies of literacy, numeracy and digital competency cutting across the six Areas. Progression of learning is acknowledged as a continuum rather than a succession of key standard stages.

In 2018, the Welsh Government invited the OECD to assess the progress made in advancing the curriculum reform since its previous report (2017[21]), and suggest ways to move forward with its implementation. The Welsh Government has been developing the new national curriculum framework and assessment arrangements in collaboration with the education community. The draft Curriculum for Wales guidance was offered for public consultation between April and July 2019, to then be refined and tested by schools. Finalised versions of the curriculum guidance and assessment arrangements were published in January 2020. Subject to the successful passage of the Curriculum and Assessment Bill through the National Assembly for Wales, all schools are expected to plan their own curriculum based on the new framework and enact it by September 2022 for nursery levels to Year 7, then roll it out one Year at a time.

In order to turn this curriculum change into reality, the Welsh Government and all stakeholders involved must maintain a coherent strategy as they progressively implement the new curriculum. Implementation is more about building and fine-tuning a policy collaboratively rather than executing it. Consequently, it is of great importance to understand how the design of the curriculum, the engagement of stakeholders and the context interact, and what they imply for the implementation process. The OECD team's analysis and suggestions aim to help Wales tackle the main issues linked to the new curriculum and plan the next steps of its implementation so schools and their students can reap the benefits from this ambitious change.

Methodology of the assessment

This report is part of the OECD's Implementing Education Policies support programme with Wales (Box 1.1). It analyses Wales' curriculum reform (2015-2019) in the wider context of the country's education reform journey, and provides guidance on how the new Curriculum for Wales can be implemented effectively. An OECD team was created specifically for this project with Wales, bringing together analysts from the OECD's Implementing Education Policies project and an external expert (Annex A). The project follows a concrete methodology to support implementation that combines research with field work, and engages with stakeholders in the country to ensure validity of the analysis and ownership of the recommendations. More concretely, the team: documented key aspects of education policy in Wales; drew on qualitative and quantitative comparative data from benchmarking education performers; undertook two assessment visits to Wales (Annex B); conducted additional phone interviews with stakeholders (Annex B); and maintained regular exchanges with the national co-ordination team with the Welsh Government. The OECD team also made extensive use of statistical information and policy documents provided by the Welsh Government and other institutions.

The present report has also benefitted from over six years of work between the OECD and Wales. This long-standing work included exchanges with different stakeholders, visits in numerous schools across the country, and discussions with many through workshops and advisory groups. The OECD team was thus able to build on previous knowledge and use reports from visits conducted between 2014 and 2019, as well as findings from previous OECD assessments for the analysis (OECD, 2018[5]; OECD, 2017[21]; OECD,

2014[17]). The Welsh Government also took part in the OECD Future of Education and Skills 2030 project, where countries and jurisdictions collectively reflect upon the types of competencies students need to thrive.

The report builds on the analytical framework developed by the OECD's Implementing Education Policies team (Viennet and Pont, 2017[23]) to explore the elements that can contribute to the effective implementation of the Curriculum for Wales. The framework suggests that to have a coherent implementation strategy, policy makers need to engage with stakeholders early on in the process, and take into account the policy design and its context. The report provides an analytical lens to those involved with the curriculum policy, and suggests actions to take next to progress with its implementation throughout the system.

Box 1.1. Implementing policies: supporting change in education

The OECD programme *Implementing Policies: Supporting Effective Change in Education* 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 the OECD Directorate for Education and Skills has comparative expertise in, including: introducing new curricula, developing schools as learning organisations, teacher policy, monitoring, evaluation, assessment and accountability systems and building educational leadership capacity, among others.

The tailored support consists of three complementary strands of work that aim to target countries' and jurisdictions' needs to introduce policy reforms and ensure impactful changes:

- **Policy assessments** take stock of reforms, policies and change strategies. The resulting report consists of an analysis of current strengths and challenges and provides concrete recommendations for enhancing and ensuring effective education implementation of the policy analysed. It follows a concrete methodology: a country questionnaire and 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.

For this project in Wales, two policy assessment visits were undertaken in September and October 2019, and additional interviews were conducted over the phone between August and October 2019. The assessment further built on nearly six years of information collected through the various OECD assessments conducted for Wales (OECD, 2018[5]; 2017[21]; 2014[17]).

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

Chapter 2 analyses the design of the new Curriculum for Wales, including its draft framework, student assessment arrangements, and its implications for Wales' teaching workforce. Chapter 3 discusses how stakeholders co-constructed the new curriculum and the importance of their engagement for the success of the policy. Chapter 4 reviews the main contextual elements that could facilitate or hinder curriculum implementation. Chapter 5 builds upon the analysis and conclusions developed in each of the previous chapters and offers an overview of the OECD team's recommendations to adjust Wales' implementation strategy in the short and medium term to ensure the new Curriculum is effectively implemented across Wales.

References

Donaldson, G. (2015), *Successful Futures: an independent review of curriculum and assessment arrangements in Wales*, Welsh Government, Cardiff, UK, http://dx.doi.org/10.1080/00220271003759249 (accessed on 12 December 2019). [19]

Estyn (2014), *The annual report of HM Chief Inspector of Education and Training in Wales 2013-2014*, Estyn, Cardiff, https://www.estyn.gov.wales/sites/www.estyn.gov.wales/files/documents/The_Annual_Report_of_Her_Majestys_Chief_Inspector_of_Education_and_Training_in_Wales_2013-2014.pdf (accessed on 3 January 2020). [16]

Hill, R. (2013), *The future delivery of education services in Wales*, Robert Hill Consulting, Cardiff, https://gov.wales/sites/default/files/consultations/2018-01/130621-delivery-of-education-report-en.pdf (accessed on 3 January 2020). [15]

OECD (2019), *PISA 2018 Results (Volume II): Where All Students Can Succeed*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/b5fd1b8f-en. [14]

OECD (2019), "Results for regions within countries", in *PISA 2018 Results (Volume I): What Students Know and Can Do*, OECD Publishing, Paris, https://dx.doi.org/10.1787/bad603f0-en. [6]

OECD (2018), *Developing Schools as Learning Organisations in Wales*, Implementing Education Policies, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264307193-en. [5]

OECD (2017), *The Welsh Education Reform Journey - A rapid policy assessment*, OECD Publishing, Paris, http://www.oecd.org/education/The-Welsh-Education-Reform-Journey.pdf (accessed on 3 January 2020). [21]

OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264266490-en. [7]

OECD (2014), *Improving Schools in Wales: An OECD Perspective*, OECD publishing, Paris, http://www.oecd.org/education/Improving-schools-in-Wales.pdf (accessed on 12 December 2019). [17]

OECD (2014), *PISA 2012 Results: What Students Know and Can Do (Volume I, Revised edition, February 2014): Student Performance in Mathematics, Reading and Science*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264208780-en. [8]

OECD (2010), *PISA 2009 Results: What Students Know and Can Do: Student Performance in Reading, Mathematics and Science (Volume I)*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264091450-en. [9]

OECD (2007), *PISA 2006: Science Competencies for Tomorrow's World: Volume 1: Analysis*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264040014-en. [10]

Office for National Statistics (2019), *Population estimates for the UK, England and Wales, Scotland and Northern Ireland*, Office for National Statistics, London, https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2018 (accessed on 3 January 2020). [1]

Sizmur, J. et al. (2019), *Achievement of 15-year-olds in Wales: PISA 2018 national report*, National Foundation for Educational Research, Slough, https://gov.wales/sites/default/files/statistics-and-research/2019-12/achievement-15-year-olds-program-international-student-assessment-pisa-national-report-2018_0.pdf (accessed on 3 January 2020). [12]

Viennet, R. and B. Pont (2017), "Education policy implementation: A literature review and proposed framework", *OECD Education Working Papers*, No. 162, OECD Publishing, Paris, https://dx.doi.org/10.1787/fc467a64-en. [23]

Welsh Government (2020), *Curriculum for Wales guidance*, Welsh Government, Cardiff, https://hwb.gov.wales/storage/b44ad45b-ff78-430a-9423-36feb86aaf7e/curriculum-for-wales-guidance.pdf. [22]

Welsh Government (2019), *Annual population survey - Frequency of speaking Welsh by local authority and year*, Welsh Government, Cardiff, https://statswales.gov.wales/Catalogue/Welsh-Language/Annual-Population-Survey-Welsh-Language/welshfrequency-by-la-year (accessed on 3 January 2020). [4]

Welsh Government (2019), *Child poverty progress report 2019*, Welsh Government, Cardiff, https://gov.wales/sites/default/files/publications/2019-12/child-poverty-strategy-2019-progress-report.pdf (accessed on 3 January 2020). [2]

Welsh Government (2019), *Schools' census results 2019*, Welsh Government, Cardiff, https://gov.wales/sites/default/files/statistics-and-research/2019-07/school-census-results-2019-764.pdf (accessed on 3 January 2020). [3]

Welsh Government (2017), *Education in Wales: Our national mission - Action plan 2017-21*, https://gov.wales/sites/default/files/publications/2018-03/education-in-wales-our-national-mission.pdf (accessed on 3 January 2020). [13]

Welsh Government (2016), *Examination results in Wales, 2015/2016 (Provisonal)*, Welsh Government, Cardiff, https://gov.wales/sites/default/files/statistics-and-research/2019-05/examination-results-september-2015-to-august-2016-provisional.pdf (accessed on 3 January 2020). [11]

Welsh Government (2015), *Qualified for life A curriculum for Wales-a curriculum for life*, OGL, Cardiff, https://dera.ioe.ac.uk/24680/1/151021-a-curriculum-for-wales-a-curriculum-for-life-en_Redacted.pdf (accessed on 5 September 2018). [20]

Welsh Government (2014), *Qualified for Life: an education improvement plan for 3 to 19-year-olds in Wales*, Welsh Government, Cardiff, https://dera.ioe.ac.uk/21054/1/141001-qualified-for-life-en_Redacted.pdf. [18]

2 Designing the Curriculum for Wales

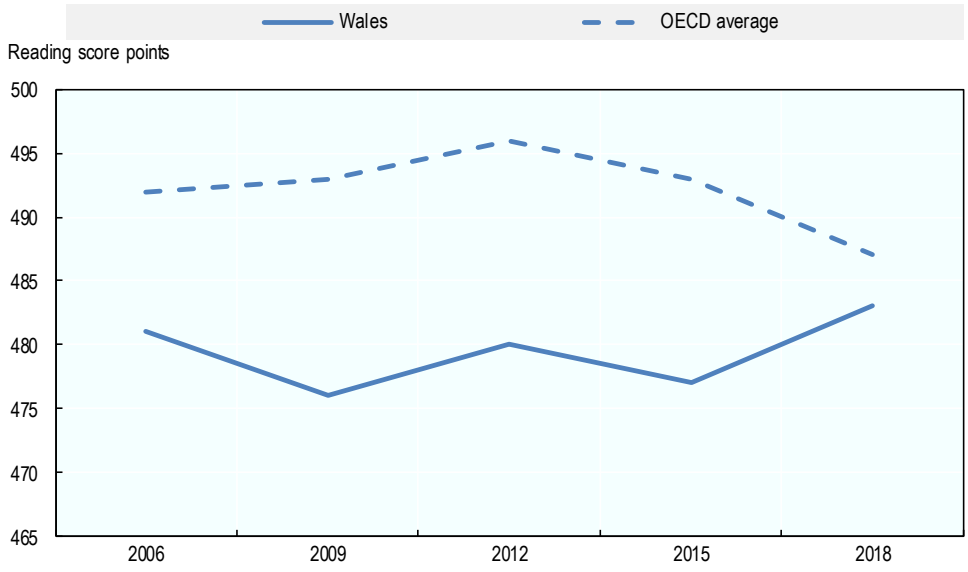
This chapter analyses the design of Wales' new curriculum policy, including its vision, its framework, and its implications in terms of teacher capacity, equity and resources. The Curriculum for Wales follows a vision shaped by four purposes for student learning. The national curriculum framework, still under development at the time of writing this report, aims to guide schools in shaping their own school curriculum. As the new curriculum differs from the current one, there are important implications in terms of resources, schools' and teachers' capacity, and equity that need consideration for success in its realisation.

Why a new curriculum?

Following a nationwide consultation about what Wales wanted for its education system in the future, Welsh education stakeholders agreed upon the need for curriculum change, to a degree that held promise for actual change to take place (Donaldson, 2015[1]). The Welsh Government acknowledged the result of the consultation and decided to make curriculum reform a central piece to its reform agenda detailed in *Education in Wales: Our national mission*. Wales' "national mission" consists of the three objectives to raise school standards, reduce the attainment gap between different groups of learners, and to ensure an education system that is a source of national pride and public confidence (Welsh Government, 2017[2]). The design of a policy plays a central role in its implementation, as the nature of a policy solution and the way it is formulated, influence how the policy plays out across an education system. In particular, the vision and its justification, the type of policy tools and the capacity of those who have to implement it, can enable or interfere with the reform process. The literature on policy implementation further shows that an education policy is more likely to become reality if a strong case underpins the need for change (Viennet and Pont, 2017[3]; Fullan, 2015[4]).

Wales has strong reasons to make a curriculum change. First, the current curriculum does not seem aligned to guarantee the quality of learning experiences for all students in the future. Performance on international assessments such as PISA, national assessments and reports by the education and training inspectorate for Wales, found a continuous degradation of student performance until 2015 which confirmed concerns about the quality of student learning (OECD, 2014[5]). As shown in Figure 2.1, Wales' 15 year-old students have consistently scored below OECD average on the PISA tests since 2006. The 2018 PISA results showed some improvement with Wales increasing its mean score and reducing the gap to the average, however, the decrease in the OECD average itself contributes to this reduction.

Figure 2.1. Reading performance of 15-year-olds, Wales and OECD, PISA 2006-2018



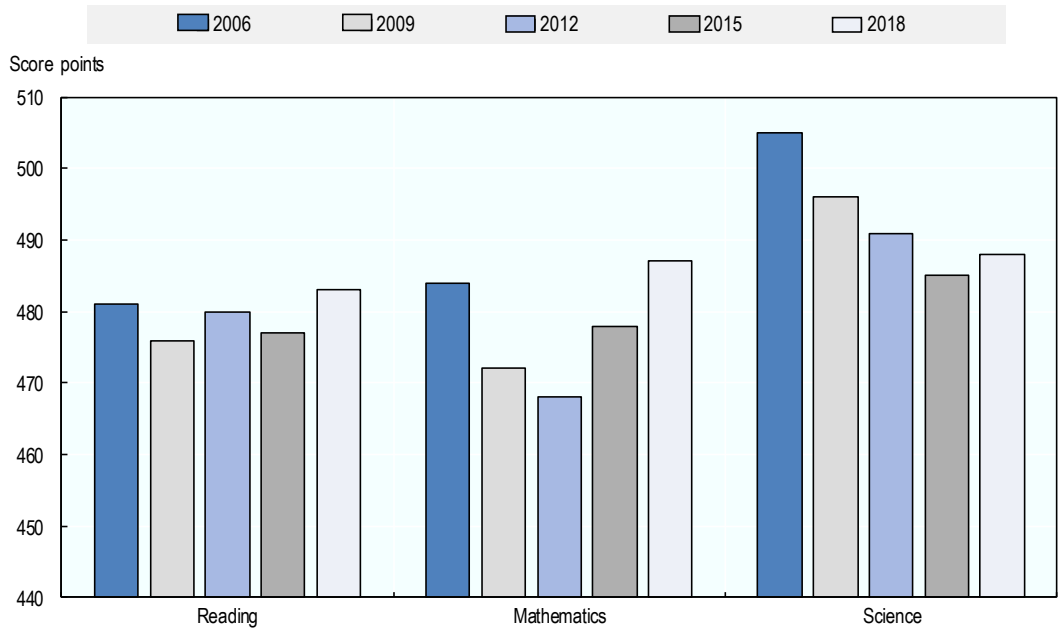
Note: In 2015 changes were made to the test design, administration, and scaling of PISA. These changes add statistical uncertainty to trend comparisons that should be taken into account when comparing 2015 results to those from prior years. Please see the Reader's Guide and Annex A5 of PISA 2015 Results (Volume I): Excellence and Equity in Education (OECD, 2016[6]) for a detailed discussion of these changes.

Source: (OECD, 2019[7]) "Results for regions within countries", PISA 2018 Results (Volume I): What students know and can do, OECD Publishing Paris, https://doi.org/10.1787/bad603f0-en ; (OECD, 2016[6]) PISA 2015 Results (Volume I): Excellence and Equity in Education, http://dx.doi.org/10.1787/9789264266490-en; (OECD, 2014[8]) PISA 2012 Results: What Students Know and Can Do (Volume I, Revised edition, February 2014): Student Performance in Mathematics, Reading and Science, http://dx.doi.org/10.1787/9789264208780-en; (OECD, 2010[9]) PISA 2009 Results: What Students Know and Can Do: Student Performance in Reading, Mathematics and Science (Volume I), http://dx.doi.org/10.1787/9789264091450-en; (OECD, 2007[10]) PISA 2006: Science Competencies for Tomorrow's World: Volume 1: Analysis, http://dx.doi.org/10.1787/9789264040014-en.

StatLink https://dx.doi.org/10.1787/888934084380

A slight improvement in all core skills on PISA 2018 (Figure 2.2) holds promise for the future at a time when Wales mobilises nationally to improve the quality of its education. While it still has smaller shares of high performers than the OECD average and the proportions of low performers remain only marginally better than average, Wales has made slight progress in almost all PISA core skills in both measures (OECD, 2019[7]).

Figure 2.2. Student performance in reading, mathematics and science in Wales, PISA 2006-2018



Note: 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[6]) for a detailed discussion of these changes.
Source: (OECD, 2019[7]) "Results for regions within countries", PISA 2018 Results (Volume I): What students know and can do, OECD Publishing Paris, https://doi.org/10.1787/bad603f0-en; (OECD, 2016[6]) PISA 2015 Results (Volume I): Excellence and Equity in Education, http://dx.doi.org/10.1787/9789264266490-en; (OECD, 2014[8]) PISA 2012 Results: What Students Know and Can Do (Volume I, Revised edition, February 2014): Student Performance in Mathematics, Reading and Science, http://dx.doi.org/10.1787/9789264208780-en; (OECD, 2010[9]) PISA 2009 Results: What Students Know and Can Do: Student Performance in Reading, Mathematics and Science (Volume I), http://dx.doi.org/10.1787/9789264091450-en; (OECD, 2007[10]) PISA 2006: Science Competencies for Tomorrow's World: Volume 1: Analysis, http://dx.doi.org/10.1787/9789264040014-en.

StatLink https://dx.doi.org/10.1787/888934084399

Second, reports highlight the large variability of students' performance within Welsh schools in spite of a policy commitment to equity (OECD, 2016[6]). Evidence and country practices point that academic excellence can go hand in hand with equity, and many education systems have embraced equity, quality and well-being as the principles an education system should strive for, integrating them into their education goals (OECD, 2013[11]; OECD, 2018[12]).

Third, the general perception is that essential features of the curriculum and assessment arrangements currently in use in Wales no longer reflect the reality learners should prepare for in the 21st century. The national curriculum, based on the Education Reform Act 1988, was previously reviewed in 2008. A series of studies by international and Welsh experts come to similar conclusions, that the national curriculum requires significant changes to help learners in Wales thrive. Suggestions that the curriculum has become overcrowded, atomistic and cumbersome are widespread, in spite of ongoing efforts to enhance it (Donaldson, 2015[1]). Numerous education systems including British Columbia, New Zealand, Scotland, Japan, or Mexico came to similar conclusions over the past decade, that their school curricula could be updated to develop the type of learning students needed in the 21st century.

Fourth, a national consultation on education in Wales concluded that the curriculum was too prescriptive, limiting pedagogical flexibility and possibilities for educators to adapt teaching to the needs of the learners (Donaldson, 2015[1]; Welsh Government, 2015[13]). Wales, like many OECD jurisdictions, questions whether prescribed content and putting the emphasis on accountability is the most beneficial to its education. The balance between national coherence and professional autonomy is notoriously hard to achieve, but beneficial to student learning (Sinnema, 2015[14]).

Finally, student assessment and evaluations in general are perceived as serving accountability purposes at the expense of learning (Donaldson, 2015[1]). Student assessment results can serve various purposes. The OECD recommends that assessments should serve improvement as well as accountability, thus encouraging countries to strike a balance between formative and summative assessments to ensure both purposes are achieved. The purpose of each assessment should also be clarified ahead of time, and a variety of assessment approaches should be used in order to avoid distorting student learning (OECD, 2013[11]).

A key component of the learning environment, curriculum is a policy lever used to support improvement in schools and in student learning (OECD, 2015[15]; OECD, 2019[16]). When designed and enacted in all schools, the new curriculum and corresponding assessment arrangements aim to transform the Welsh approach to teaching, learning and assessing, to realise the national vision for education.

An overview of the Curriculum for Wales

The Curriculum for Wales was developed over the course of several years and the final version of its framework (or 'guidance') documents was published in January 2020 (Welsh Government, 2020[17]), just as this report was under pre-publication review. The analysis in this chapter is based on the version of the framework documents published for consultation in April 2019 (Welsh Government, 2019[18]).

The new Curriculum for Wales is aimed at all maintained (public) and funded schools for children aged 3 to 16. It intends to provide all children equal access to a broad and balanced education of high quality, including students with additional learning needs. A curriculum and assessment framework is established at the national level, but fully implementing the curriculum requires school-level curriculum design as well.

The new curriculum is built around the "four purposes" of education and around the "statement of what matters", which describe what is essential for students to learn. The type of learning promoted is holistic, interdisciplinary, and integrates knowledge, skills and experience together (referred to as competency-based within the OECD framework (OECD, 2019[19])). As such, learning is structured around six Areas of Learning and Experience (Areas) that integrate all current subjects; "statements of what matters" to learn in each Area, further detailed by descriptions of learning; three cross-Areas competencies of literacy, numeracy and digital competency; four "integral" competencies of creativity and innovation, critical thinking and problem-solving, personal effectiveness, and planning and organising. Progression of learning is seen as a continuum rather than a succession of stages, which aligns with the intention to reclaim assessment as a tool to support rather than judge learning.

The six Areas pool individual subject disciplines, which are encouraged to be linked in a stronger and more meaningful way than in the past, but still play an important role as learners advance. The final guidance documents provide, for each Area, an introduction on what it covers, "statements of what matters", principles of progression, descriptions of learning and specific guidance to develop the school curriculum in this particular Area. Box 2.1 provides some detail on those key elements.

Box 2.1. The six Areas of Learning and Experience of the Curriculum for Wales

An example of "statements of what matters" and descriptions of learning progression steps are provided below for each Area:

Expressive Arts

Statement of what matters, e.g.: "Exploring the expressive arts is essential to developing artistic skills and knowledge and it enables learners to become curious and creative individuals."

Progression step 5 e.g.: "I can investigate and analyse how creative work is used to represent and celebrate personal, social and cultural identities."

Health and Well-Being

Statement of what matters, e.g.: "Developing physical health and well-being has lifelong benefits."

Progression step 5 e.g.: "I can apply a range of techniques to prepare a variety of nutritious meals."

Humanities

Statement of what matters, e.g.: "Enquiry, exploration and investigation inspire curiosity about the world, its past, present and future."

Progression step 5 e.g.: "I can make coherent and reasoned responses and judgements that take into consideration different viewpoints."

Languages, literacy and communication

Statement of what matters, e.g.: "Expressing ourselves through languages is key to communication."

Progression step 5 e.g.: "I can evaluate and respond critically to what I have heard, read or seen."

Mathematics and numeracy

Statement of what matters, e.g.: "The number system is used to represent and compare relationships between numbers and quantities."

Progression step 5 e.g.: "I have explored the relationship between powers, roots and fractional indices and can use it to solve problems."

Science and Technology

Statement of what matters, e.g.: "Being curious and searching for answers is essential to understanding and predicting phenomena."

Progression step 5 e.g.: "I can link experimental findings and theoretical knowledge to draw valid conclusions."

Source: Welsh Government (2020[17]), *Curriculum for Wales guidance*, http://hwb.gov.wales/storage/b44ad45b-ff78-430a-9423-36feb86aaf7e/curriculum-for-wales-guidance.pdf.

The four purposes have been a key driver of the curriculum framework development. They aim to lay the basis for a common language and direction for the designers to move forward. In Wales, the curriculum designers included a large variety of stakeholders, following the government's commitment to co-construction in education policy. Experts and government officials worked directly with a network of Pioneer schools (see Box 2.2) and educators to design, test and refine the new curriculum before presenting the framework to the public for feedback and further refinement. The Welsh Government co-ordinated this development over the course of several years.

The new Curriculum for Wales intends to provide all children with equal access to a broad and balanced education of high quality, including students with additional learning needs. A curriculum and assessment framework is established at the national level, but fully implementing the curriculum requires school-level curriculum design as well. When designed and enacted in all schools, the new curriculum and corresponding assessment arrangements aim to transform the Welsh approach to teaching, learning and assessing, to realise the national vision for education.

Box 2.2. Schools at the centre of curriculum development

The Pioneer and Innovation schools

The Pioneer Schools Network consists of three subgroups working on designing and developing several key elements of the new curriculum and mechanisms necessary to its realisation. In total, around 200 schools worked on the curriculum and assessment arrangements (94 schools), the Digital Competency Framework (13 schools), and the National Approach to Professional Learning (83 schools) in collaboration with local authorities, regional consortia, the Welsh Government, Estyn and a range of experts on the design and implementation of the new curriculum. Specifically, the schools working on curriculum and assessment designed the high-level framework for the new curriculum and developed the Areas of Learning and Experience and other key elements of the new curriculum. In 2018, 16 schools were drawn from this network to become Innovation schools in order to further refine the curriculum. Their role was to test local development and implementation of the curriculum and to generate knowledge about the practices, activities and initiatives required to embed the new curriculum effectively. To ensure representation of all modes of education provision, four schools from each regional consortium and a range of primary, secondary and special schools were selected. An analysis of their experience was completed in November 2019, in order to share their lessons learnt with the Welsh Government and other schools, and inform the development and implementation of the curriculum framework.

Sources: OECD (2018[20]), *Developing schools as learning organisations in Wales*, https://dx.doi.org/10.1787/9789264307193-en; Wavehill (2019[21]), *Innovation Schools: End-of-Phase Reporting Synthesis*, https://gov.wales/sites/default/files/consultations/2019-11/innovation-schools-end-of-phase-reporting-synthesis.pdf.

Observations and issues about the curriculum

Developing a shared vision

The new curriculum has been developed following the nationwide review of curriculum and assessment arrangements (Donaldson, 2015[1]), in which the education community in Wales succeeded in co-constructing a compelling vision of what education should enable Welsh learners to become (OECD, 2018[20]). The vision, formulated in four purposes, aims to guide Wales' education reform agenda and more specifically, its curriculum reform so they enable children and young people in Wales to be:

- ambitious, capable learners, ready to learn through their lives
- enterprising, creative contributors, ready to play a full part in life and work
- ethical, informed citizens of Wales and the world
- healthy, confident individuals, ready to lead fulfilling lives as valued members of society.

This vision resonates with others developed in recent years by several OECD countries and economies such as Australia, Ontario and British Columbia (Canada), Estonia, Finland, Japan and New Zealand who redesigned their curricula to align them with what students need to learn to fulfil their personal, academic and future professional life. The preliminary findings of the OECD's Future of Education and Skills 2030 project further support these future-oriented visions aiming for the holistic development and engagement

of learners. In addition, key elements of Wales' new curriculum framework are in line with the good practices emphasised by the project (OECD, 2019[19]).

The national vision is widely shared at least in principle across Wales. Sharing a compelling vision at the national level is essential as it can steer a system and draw key people together to work towards it (Hargreaves and Shirley, 2009[22]). The interviews led by the OECD team and several other independent studies commissioned by the Welsh Government confirm this widespread support for the four purposes of the curriculum. Students, teachers and parents interviewed by the OECD team and other experts referred to the four purposes repeatedly (OECD interviews).

To facilitate comprehension of the vision, the curriculum framework designers made efforts to convey concrete objectives that serve the vision. Research in policy implementation finds that defining concrete objectives helps frame the vision in operational terms, thus facilitating action (Viennet and Pont, 2017[3]). Especially, the literature on curriculum reform emphasises that minimising the possibility to misinterpret the core goals of a curriculum is crucial for successful implementation (Sinnema, 2017[23]; Aitken, 2005[24]). Vital to stakeholders' understanding of and response to the curriculum, are the coherence and quality of the curriculum policy itself (Aitken, 2006[25]; Aitken, 2005[24]; Spillane, Reiser and Reimer, 2002[26]). With high-quality design comes greater clarity about what the various elements mean, and more depth of understanding about how they might be enacted. The curriculum statement itself will support sense-making by meeting high quality design criteria such as (Aitken, 2005, p. 63[24]):

- clearly communicating the rationale for key elements and key changes, reducing the tendency to attend only to surface features
- engaging the prior knowledge of those working with the curriculum and explicitly alerting them to possible misconceptions that are not in line with the actual aspirations of the curriculum
- connecting more general principles with more specific examples that serve to clarify and reduce misunderstanding
- using graphics in ways that help people understand how elements of the curriculum interact
- ensuring logical text organisation and signalling devices such as headings and connectives to reduce unnecessary cognitive load and to make the logical connections between the elements of the curriculum more explicit
- maximising internal coherence and minimising complexity by checking for contradictions and carefully checking for explicit alignment of any potentially competing elements.

The draft statutory guidance documents of the new Curriculum for Wales have a section dedicated to explaining how each of the new Areas of Learning and Experience supports the four purposes of the curriculum (Welsh Government, 2019[27]). What is more, the "key characteristics", "statements of what matters" and "descriptions of learning" detailed for each Area aim to help schools understand what aspects of learning contribute to the four purposes, and how students can demonstrate their achievements. Some schools the OECD team visited or interviewed also conducted collective work with their students, leaders, teachers and assistants to define what learning activities and experiences could help students develop the four purposes (OECD interviews). An analysis of the feedback provided on the draft curriculum framework during the 2019 national consultation showed that more than 60% of the respondents were convinced that the new curriculum would help realise learners achieve the four purposes (Wavehill, 2019[28]). Other sources, including OECD interviews and an independent review commissioned by the Welsh Government, have also suggested this.

There is much variability in the way stakeholders can understand and respond to key aspects of a curriculum, even when they express their commitment to them (Sinnema, 2011[29]; Sinnema and Aitken, 2011[30]; Spillane, 2005[31]; Spillane, Reiser and Reimer, 2002[26]). Stakeholders often make sense of the same policy messages in different ways, which can largely affect implementation if key elements of the policy are understood and enacted in significantly different or even contradictory ways (Pietarinen, Pyhältö and Soini, 2017[32]; Siciliano et al., 2017[33]; Coburn, 2001[34]; Weick Sen, 1995[35]). The OECD team found a wide range of perceptions among Welsh stakeholders of what the four purposes and the curriculum might imply for practice. Although all the stakeholders interviewed by the OECD team agree on the aspiration for "ambitious learners" and "creative contributors", the observable manifestation of such qualities in students, and specific pedagogical activities and experiences to guide them in their development remain unclear in many interviews. Especially, perceptions vary on the scope of the transformations required in teaching and leadership practices, support initiatives, and interactions with learners, parents and communities (OECD interviews).

Defining a new curriculum for holistic learning

The new curriculum is in keeping with an international trend to develop curriculum frameworks based on broad competencies as opposed to curricula primarily based on content or on skills (Bergsmann et al., 2015[36]; Wesselink et al., 2010[37]; OECD, 2019[38])). Although it does not specifically refer to the concept, the Curriculum for Wales' framing around purposes is consistent with the conceptualisation of competencies developed by the OECD's Future of Education and Skills 2030 project, which defines competencies as the integration of knowledge, skills, attitudes and values that enable students to perform in ill-defined environments, thus allowing them to navigate a fast-paced and uncertain world (Wesselink et al., 2010[37]; Mulder, 2001[39]; OECD, 2018[12]). In contrast, a content-centred curriculum, for instance, focuses on transmitting discipline knowledge as a goal in itself, regardless of its relevance to student learning (Schiro, 2008[40]). The definition of competencies as integrative and with a broad performance orientation allows the debate to shift away from the traditional "knowledge v. skills" focus, by acknowledging the importance of both in learning.

Similar to its counterparts in British Columbia and Finland (Box 2.3), for instance, the Welsh Government had to clarify to its stakeholders that the new curriculum did not abolish disciplinary knowledge and skills (Welsh Government, 2019[41]). The new structure around six Areas aims to guarantee Wales' progress towards holistic learning and away from fragmentation, with the Areas encompassing existing subjects and aiming to promote cross-disciplinarity at school level (Welsh Government, 2019[18]). Under the new curriculum, schools and teachers have been positioned as curriculum designers with the freedom to develop their own approach in support of the four purposes. They can choose to completely integrate subjects into Areas, or to teach on the basis of subjects while emphasising their links with other subjects within the broader framework of each Area, as long as it enables learners to develop within the four purposes (Welsh Government, 2019[41]).

Box 2.3. Curricula for the 21st century

British Columbia (Canada)

British Columbia developed a new curriculum to modernise its approach to learning and help its students become thoughtful, creative, skilled, productive, co-operative citizens. The new curriculum is concept-based to promote essential learning, and competency-driven, with literacy and numeracy as foundational competencies, complemented by the core competencies (thinking, communication, personal and social). The new pedagogical model builds on big ideas ("UNDERSTAND"), content ("KNOW") and curricular competencies ("DO") altogether.

Finland

Finland's National Core Curriculum is structured around seven transversal competencies aimed to promote students' growth as human beings and citizens: Thinking and learning to learn; Cultural competence, interaction and expression; Taking care of oneself, managing daily life; Multi-literacy; Digital (ICT) competence; Working life competence, entrepreneurship; and Participation, involvement, building a sustainable future. Each transversal competency covers knowledge, skills, values, attitudes and volition (willingness to take action), and is further elaborated with objectives and curriculum content. The rationale behind the concept of transversal competency is to promote that students should be able to apply their knowledge and skills in an interdisciplinary manner in a given situation, while acknowledging that student learning is influenced by students' values, attitudes and volition.

Sources: Government of British Columbia (2019[42]), *Curriculum and assessment* – Province of British Columbia website, http://www2.gov.bc.ca/gov/content/education-training/k-12/teach/curriculum; Magee and Jensen (2018[43]), *Overcoming challenges facing contemporary curriculum. Lessons from British Columbia*, http://learningfirst.com/wp-content/uploads/2018/11/Overcoming-challenges-facing-contemporary-curriculum-Lessons-from-British-Columbia.pdf; Finnish National Agency for Education (OPH) (2016[44]), *National Core Curriculum for Basic Education*, https://verkkokauppa.oph.fi/EN/page/product/national-core-curriculum-for-basic-education-2014/2453039.

Moving away from a curriculum structured around subjects is challenging, especially in secondary schools whose teaching workforce, timetables and leaving exams have traditionally been organised around these subjects. The challenge lies in finding concrete mechanisms to weave knowledge, skills and values from different subjects to allow learners to develop deep understanding of the issues at hand and to transfer the skills and knowledge they gain to other situations whether at school, university, in their personal or professional life. The freedom to test more or less integrated designs can help schools find balance with the new curriculum if it comes with proper support and monitoring within schools and from outside actors (see the section "Moving towards locally designed school curriculum" in this chapter for further analysis).

A key feature of the Curriculum for Wales is the use of big ideas ("statement of what matters") to structure learning. Big ideas are those that link understandings together into coherent wholes, both within and across traditional subjects (Harlen, 2010[45]; Charles, 2005[46]). Big ideas curricula structure learning primarily around the key ideas that are essential in each learning area and most relevant to students' experience during and beyond school. The aim is to create a framework for learning that teachers and curriculum developers can then build on to define the learning experiences that will bring students to master these big ideas (Harlen, 2015[47]; Harlen, 2010[45]).

Wales' draft framework defines between three and six "statements of what matters" for each Area. The statements aim to capture the fundamental learning concepts for the Area and provide context for the learning content and activities that take place in the classroom. Groups of experts, teachers and other stakeholders developed the statements, also using information from Pioneer schools' own experience. Detailed by descriptions of learning (assertion presented in the first person phrased as if the learner said them, which define steps of progression), the "statements of what matters" are a guide to determine which skills, knowledge and value students need to progress in their learning within each Area. These descriptions are Area-specific, but they call for different types of skills, knowledge and values; they are complemented by the three cross-curricular skills of literacy, numeracy and digital competency, and the four integral competencies of creativity and innovation, critical thinking and problem-solving, personal effectiveness, and planning and organising (Welsh Government, 2020[17]).

This concept of big ideas has gained some importance in discussions about curriculum reforms in recent years (OECD, 2019[48]). Little evidence exists on the effect of big ideas on learners' outcomes, because of the difficulty to measure and compare direct links between types of curriculum and learning, and because a small number of countries have only started to introduce it systematically. However, an increasing number of research initiatives help identify how the use of big ideas in curricula can impact learning (Chalmers et al., 2017[49]; Sinnema, 2017[23]; Harlen, 2015[47]; Priestley and Sinnema, 2014[50]; Magee and Jensen, 2018[43]). A key challenge for the systems developing this type of curriculum, including for Wales, is that big ideas must be clear enough to capture all the key concepts learners are expected to learn about, while not being overly prescriptive. Following the 2019 consultation on the draft framework, it appeared that the 2019 versions of the statements of what matters were still unequal in quality and clarity, along with other key elements structuring the framework. Close to 90% of respondents deemed that the framework was difficult to understand and lacked consistency (Wavehill, 2019[28]). Stakeholders interviewed by the OECD team during the last quarter of 2019 also acknowledged that the draft framework documents were long (74 pages per Area on average plus 40 pages of introduction and assessment arrangements), sometimes repetitive and unclear.

The ambition of holistic learning also affects the transitions and the alignment between the various levels of education. The new Curriculum for Wales is aimed at learners aged 3 to 16, spanning the last years of early childhood education and care ('nursery' as referred to in Wales), all primary and lower secondary education, and the first year of upper secondary education (OECD, 2018[51]). This creates alignment issues, which the Welsh Government and education stakeholders should continue to discuss. A specific curriculum is expected to be published in 2021 for the settings that will be involved with the new curriculum in early childhood education and care (ECEC)[1]. The final version of the framework documents include guidance to co-ordinate learners' progression between schools and across levels of education (Welsh Government, 2020[17]). At this stage, schools thus have some basis for discussions. These discussions between nursery, primary and secondary education levels will be crucial before September 2022, to ensure coherent implementation across Wales. In the future, higher and post-secondary education institutions may also need to reflect on the effect of the new curriculum on their students and their own teaching practices, before the first cohorts to experience the Curriculum for Wales reach higher levels of education (OECD interviews).

The Welsh Government and stakeholder working groups made clarification of the framework one of their priorities following the 2019 consultation, to enhance the version published at the beginning of 2020. The final version of the framework documents brought the volume down to about 20 pages per Area, with detailed introductory parts and precisions about principles for curriculum design, which the OECD team believes will be beneficial (Welsh Government, 2020[17]). Developing quality content in clear frameworks

that give sufficient guidance, without being too prescriptive for practitioners, will be at the heart of success with the implementation of the Curriculum for Wales.

A new approach to assessment for learning

The new Curriculum for Wales also revisits the role of assessment in students' learning progression. Following the Donaldson report (2015[1]) and the national consultation on the draft curriculum framework (2019), the Welsh Government suggests moving away from the formative v. summative dichotomy about student assessment (Welsh Government, 2019[52]). Assessment is promoted as a tool to support the progress of each individual learner in relation to the 3-16 continuum. This aligns with multilateral OECD work on curriculum and assessment (OECD, 2019[38]). Stakeholders in Wales identified three main roles of student assessment under the new arrangements:

- To support individual learners on an ongoing, day-to-day basis.
- To identify, capture and reflect on individual learner progress over time.
- To understand group progress in order to reflect on practice.

Schools' priority under the new curriculum is to articulate learning progression throughout the curriculum, and to develop befitting assessment arrangements (Welsh Government, 2019[53]). The Welsh Government and relevant stakeholders, such as Estyn, are also modifying the accountability frameworks for inspection, evaluation and qualifications to reflect this change in the national approach to assessment (see Chapter 4 for more detail). The final version of the curriculum and assessment guidance documents highlight that provisions for student assessment are different from activities contributing to external accountability and national monitoring (Welsh Government, 2020[17]).

Student assessment is key to curriculum policy, as it has become a driver in how students learn in many education systems. The literature traditionally distinguishes between formative and summative purposes for student assessment. Formative assessment helps focus the attention on the learning progress of each student, enabling teachers to adapt teaching and learning strategies to respond better to students' learning needs. When used for summative purposes, assessment aims to record, mark or certify achievement. In practice, schools often have to use the same assessment for both purposes, which involves the risk that summative assessments become a hidden curriculum, encouraging a narrower approach to teaching and learning. This is particularly the case in systems where school-leaving examinations and qualification exams carry high stakes for students' future education or teachers' careers, because even in-class assessments with formative purposes can become a rehearsal of the final tests (OECD, 2013[11]).

In Wales also, the 'dual purpose' of student assessments seems to have negatively affected their quality (OECD, 2017[54]): assessments are used for accountability as well as to inform teachers and students on learning progression. In 2008, teacher-led student assessments were introduced after the first two years of primary education (the end of what is known in Wales as the "Foundation Phase"), and at the end of primary ("Key Stage 2") and lower secondary education ("Key Stage 3") (OECD, 2018[51]). These assessments had become part of the annual national data collection cycle that monitors the education system. The results were used in school evaluations, as part of the national categorisation system and of Estyn inspections, which are made public. Results were also posted on the My Local School website. The decision to make these data public and to hold schools accountable created high stakes and is widely believed to have contributed to reducing their reliability. In recognition of these challenges, annual Statutory National Reading and Numeracy Tests were introduced in 2013 for Year 2 through to Year 9. While these tests were designed as diagnostic tools, they are not always perceived this way at the school level and some teachers still struggle to make adequate use of these formative assessments (OECD, 2018[20]; Estyn, 2018[55]).

As Wales and other countries slowly work towards curricula based on broad competencies, the need for a new approach to student assessment is necessary. The literature shows that high-stakes assessments tend to encourage rote learning, and are not suitable to assess progress in the complex type of learning that the new curriculum promotes. Recent research has focused largely on forms of assessment that would be able to capture the type of learning valued in today's societies, using complex achievements that require students to mobilise integrated knowledge, skills and attitudes rather than to give a correct answer (Looney, 2011[56]). These forms of assessment include essays, oral presentations, experiments, projects and portfolios, collaborative tasks, real-life cases and problem-solving assignments. Technological progress also creates opportunities to use sophisticated assessment tools (OECD, 2013[11]). OECD countries have developed forms of assessment for learning (see Box 2.4 for an example with a similar curriculum in New Zealand). The OECD's Future of Education and Skills 2030 project is also exploring the notion of "assessment as learning", considering assessment itself as a learning opportunity (OECD, 2019[38]).

Box 2.4. Assessment for learning in New Zealand

Assessment for learning is a key principle of the curriculum and assessment arrangement in New Zealand. It describes a process by which teachers use assessment information to adjust their teaching, and students to adjust their learning strategies. Assessment is envisioned as a way to motivate and engage students in their learning because it is done in collaboration between the teacher and the learner. The principles underlying assessment are developed on a dedicated website. The principles acknowledge the importance of content knowledge for both students and teachers for meaningful assessment; as well as the crucial role of planning and communication. Similar to Wales, New Zealand sets that assessment should value progress beyond achievement. It also reminds teachers that assessment carries social and cultural aspects, and thus that assessment strategies should take into account learners' culture, background and experience to be appropriate and effective. In order to support teaching and learning, assessment must follow the identification of the learning need; be paired with feedback; and be linked to the description of the next steps for teacher and student along the learning progression path.

Source: New Zealand Government (2010[57]), *Te Kete Ipurangi website, Assessment for learning*, http://assessment.tki.org.nz/Assessment-for-learning/Underlying-principles-of-assessment-for-learning.

An important step forward in this regard is the ongoing development of a system of adaptive online personalised assessments to replace paper-based reading and numeracy tests (Welsh Government, 2017[2]). Welsh Government officials report that the adaptive online personalised assessments were implemented nationally, setting Wales among a small group of countries innovating in student assessment. Some OECD countries, including Denmark and the Netherlands, are using such computer-based adaptive technology, which presents students with test items sequentially according to their performance on previous test items. This may prove to be an important means to support teachers in translating the curriculum's statements of what matters into teaching and learning, across the full width of the new curriculum. This makes testing more efficient as more fine-grained information can be obtained in less time (OECD, 2013[11]; Scheerens, 2013[58]). The Welsh Government reported developing such tests in other areas of learning including mathematical reasoning (OECD interviews). The Innovation schools also aimed to develop some innovative forms of assessment, including project-based evaluation and e-portfolios that could be used with the new curriculum. It will take some time, however, before adaptive and other innovative forms of

assessments for all areas of learning will become available to enrich the portfolio of assessment instruments that teachers should be able to draw from.

As part of the new curriculum in Wales, student assessment has been associated with a new approach to learning progression itself. Wales describes progression as a continuum from ages 3 to 16 rather than a succession of "Key Stages" (Wales' groupings of Years of primary and secondary education). As a result, the system aims to move away from the standard-based assessment approach that measured how well each student fitted the attainment goals for each Year and Key Stage, and to remove the assessments at the end of the Foundation Phase and Key Stages. The 2020 arrangements propose a new process for developing a shared understanding of progression both within and across schools. This process is expected to replace external moderation – the mechanism used to validate the marking of student assessments at Key Stages – and to affect the way students transition into upper Years (Welsh Government, 2019[52]). The new process relies on six principles of assessment (Welsh Government, 2020[17]):

1. The purpose of assessment is to support the progression of each individual learner in relation to the 3 to 16 continuum.
2. Learners are at the heart of assessment and should be supported to become active participants in the learning process.
3. Assessment is an ongoing process which is indistinguishable from learning and teaching.
4. A shared understanding of progression, developed through professional dialogue, is integral to curriculum design and improving learning and teaching.
5. Learning across the breadth of the curriculum should draw on a wide range of assessment approaches, building a holistic picture of the learner's development.
6. Engagement between the learner, parents/carers and practitioners is essential for learner progression and well-being.

The principles of the new approach to assessment were refined up until January 2020, as reported by the Welsh Government to the OECD team. The new approach to assessment proposes to articulate a holistic progression of learning for the learner, linked to the four purposes in each of the Areas. The new approach relies fundamentally on active engagement between the learner and the practitioner, who establish together where learners are in their learning, where they need to go, and what needs to be done for them to get there, taking into account barriers to their learning. As a result, individual student assessment will increasingly require collaboration within schools, between several teaching staff, school leaders, students and parents, as well as between schools of the same clusters, as students go from primary to secondary education[2]. "Curriculum for Wales guidance", the final guidance document details the role of each key stakeholder in student assessment (Welsh Government, 2020[17]).

Nationwide implementation of the new approach to assessment is one of the next challenges for Wales which will require careful support. In keeping with the principles of school design, schools in Wales are expected to develop new student assessment practices that are coherent with the new curriculum and the guidance proposed at national level. Most Innovation schools reported that national guidance on student assessment would be essential for all schools to develop their approach. They also found that the draft guidance proposed in 2019 was limited, as the "achievement outcomes" (former elements in place of the descriptions of learning) still resembled previous assessment criteria, and that the forms of assessment suggested lacked in clarity. This could result in largely variable outcomes based on schools' contexts (Wavehill, 2019[21]). The final version of the curriculum framework document referred to "descriptions of learning", which aim to enhance the clarity and quality from the achievement outcomes.

As in other OECD countries, the practicalities of the assessment approach promoted in Wales' draft framework raises issues. Education stakeholders that the OECD team interviewed commented on a lack of clarity in the definition of competency goals and of achievement outcomes, which made it difficult for teachers to know exactly what they are trying to assess. The transversal nature of competencies also demands collaboration and co-ordination in student assessment between teachers across subjects and Areas. A central principle in Wales' new approach, collaboration requires time to settle down, especially on such a challenging issue as student assessment. There is evidence that this can be tackled through different approaches (OECD, 2013[11]). Following this analysis, the modifications proposed in the final version of the curriculum framework appear to have started tackling the issue, with more time to be spent at school and cluster levels to refine the understanding of learning progression (Welsh Government, 2020[17]).

In addition, the uncertainty around how GCSEs and A-Levels relate to the Curriculum for Wales for the cohorts who have experienced the new curriculum renders teachers cautious around the changes they will need to make to their assessment practices. Qualifications Wales is significantly involved in the discussions around curriculum and student assessment, and was consulting on the future shape of qualifications at the time of writing this report, including GCSEs, which should help practitioners, students and parents have a clearer idea of what to expect in the near future. Stakeholders reported to the OECD team that some schools and teachers had adopted a "wait-and-see" approach before changing their assessment practices. The high visibility of high-stakes assessments often puts pressure on teachers to adapt their own practices to the format used in examination tests. Research has shown that the type of complex learning and higher-order skills that these forms of assessment evaluate are heavily dependent on the situation, which limits the reliability of any task or project. This type of assessment is difficult to use for large-scale examinations, mainly because of concerns regarding their reliability, lack of the necessary resources and time necessary for their implementation. The design of GCSEs and A-Levels are likely to support or constrain the conditions required for the aspirations of the Curriculum for Wales to be achieved. Teachers may be tempted to narrow their assessment and thus their teaching to best prepare their students for these tests, to the detriment of richer and more formative assessment approaches (OECD, 2013[11]).

Moving towards locally designed school curriculum

Local design of the schools' curriculum is a driving element of the new curriculum, in line with other systems that shifted towards similar curriculum design approaches, including for instance New Zealand (*The New Zealand Curriculum*, 2007) and Finland (*The National Core Curriculum for Basic Education*, 2014). The new curriculum framework aims to guide school communities in the elaboration of their own school curriculum, as compared with a national curriculum that prescribes every aspect of learning. The main goal of this approach is to allow the curriculum to be more relevant to the local context and thus more engaging for students. This requires teachers, school leaders and possibly other local actors to take responsibility in shaping the curriculum (Welsh Government, 2019[18]). This aligns with international discussions, especially with the OECD Future of Education and Skills 2030's concepts of teacher and student agency and co-agency (OECD, 2019[38]).

Research shows that curriculum models that are less prescriptive and afford more decision-making freedom to schools tend to lack focus, but tend to be sustainable in the long run (Nieveen and Kuiper, 2012[59]). By definition, these curriculum models do not give detailed directives. The extent to which such curricula can find some coherent focus thus depends on how well schools and teachers across the system understand the principles underlying the curriculum, and on their capacity to teach accordingly. A less prescriptive curriculum can last longer than a prescriptive one because it is rooted in trust in schools' and teachers'

professional ability to lead curriculum evolution, which is a key factor of sustainable change (Nieveen and Kuiper, 2012[59]; Hargreaves and Fink, 2006[60]). In comparison, more prescriptive models tend to yield immediate results more easily but tend to be shorter-lived because they can discourage teachers from taking professional initiatives at the school level and may be more demotivating of teacher professionalism (Fullan, Hopkins and Spillane, 2008[61]; Kelly, 2004[62]).

International experience, however, shows that implementing school-level and local curriculum design in a system is challenging. Across countries, the positive association between school autonomy and students' performance is conditional on the level of accountability, the quality of the teaching force and of the support to schools and their staff to be able to respond to autonomy (OECD, 2016[63]). In some education systems, granting some forms of curricular autonomy without appropriate support became a risk for the new curriculum and its quality, as educators who did not feel prepared to develop school-level curricula resorted to former curriculum practices (OECD, 2018[64]; OECD, 2019[38]). The example of Finland shows some of the strengths and conditions required for this type of approach to be sustainable (Box 2.5).

Box 2.5. Guaranteeing quality and coherence among local curricula in Finland

The new curriculum taught in Finnish schools is guided by a national framework and designed locally, thus implying the necessity to find balance between local autonomy, national coherence and overall quality of the curriculum. Recent research suggests that Finland has struck this equilibrium thanks to several factors: the high quality of its teachers, a combination of top-down and bottom-up implementation strategies, and a culture of transparency, participation and collaboration.

High-quality teachers

In a system where teachers take responsibilities in school curriculum design, their design capabilities determine the quality of schools' curricula to a large extent. Teachers in Finland are well trained in education science and subject matters, and they display notably well-honed skills in both. Teachers are also engaged in leading their schools' pedagogical practices through constant collaboration.

Autonomy with support

The Finnish central government also supports local autonomy effectively to guarantee sustainability of the curriculum. A balanced strategy was adopted to implement the new curriculum, using both top-down and bottom-up mechanisms. At state-level, the National Agency of Education provides the framework, direction and resources to ensure local schools have capacity to implement the curriculum locally. At the local level, education stakeholders provide feedback and build solutions best suited to local needs.

Transparency and participation

Finally, the transparent and participatory nature of the Finnish reform process has helped with individual and collective sense-making, which is crucial for forming shared interpretation of the curriculum on different levels. Collaboration and knowledge-sharing among teachers also contribute to improving the quality and coherence of the local curriculum.

Sources: Halinen, I. (2018[65]), *The new educational curriculum in Finland*, http://www.allianceforchildhood.eu/files/Improving_the_quality_of_Childhood_Vol_7/QOC%20V7%20CH06%20DEF%20WEB.pdf, (Accessed 10 December 2019); Pietarinen, J., Pyhältö, K. & Soini, T. (2017[32]), *Large-scale curriculum reform in Finland – exploring the interrelation between implementation strategy, the function of the reform, and curriculum coherence*, https://doi.org/10.1080/09585176.2016.1179205.

As suggested by the Finnish example, the documentation, knowledge and resources provided to schools to support them with the curriculum will be a key factor for the success of local design. It is especially important that the Welsh Government and regional consortia help schools in this process, as Welsh educators take on responsibilities in curriculum design at the school level after decades of working with a prescribed curriculum. The quality, wide availability and consistency of support materials provided and of professional learning for all involved, are the highest priorities to guarantee that the curriculum fulfils its ambitions. Having a clear and balanced national framework is essential to effectively guide schools in their own curriculum, which was clarified during the 2019 feedback and reportedly taken into account in the framework documents published in January 2020.

The Welsh Government and regional consortia have a role to play in providing high quality professional learning, as well as more specific curriculum guidance and support materials, even while keeping true to the principle of local design. Evidence shows that providing schools with practical examples and inspirational case studies can inspire them as they design their own. Especially, schools can find great value in a selection of educative materials that illustrate the essential ideas of the curriculum and are adaptable to local aims, with some specifications regarding the content and the procedure of activities (Nieveen and Kuiper, 2012[59]; Davis and Krajcik, 2005[66]). Innovation schools fed back their experience trialling the curriculum, including on local design, which was compiled and published (Wavehill, 2019[21]). The Welsh Government reported reflecting on how best to share this information with other schools so they learn from Innovation schools but design their own locally relevant curriculum (OECD interviews).

A number of stakeholders interviewed suggested to the OECD team that, although schools are looking forward to designing their own curriculum, many of them were expecting more specific guidance and more consistent support than currently available, failing which they could consider turning to external, private providers (OECD interviews). The final version of Wales' curriculum framework documents offer a number of guidance points to help schools design their curriculum. These include using evidence and expertise; co-constructing with other education institutions, learners, parents and other stakeholders; reviewing the curriculum periodically; clarifying the pedagogical approaches according to some set principles; and keeping as a first milestone September 2022, when all learners up to Year 7 are supposed to experience the new curriculum (Welsh Government, 2020[17]). The Welsh Government and regional consortia also held information sessions around the new curriculum across the country, aiming to help all schools and their staff understand the stakes of local design and to give them time to plan their own curriculum (OECD interviews). The effectiveness of these initiatives remain uncertain at this stage. It is crucial that, if those initiatives are further developed, they take into account that the new curriculum demands new knowledge, skills and capabilities to be understood, designed and put into practice. Professional learning of high quality and precision is required.

Expanding teachers' and school leaders' capacity

A key success factor for the adoption of Wales' curriculum and assessment arrangements at the school level is the capacity of teachers, schools and their leaders. Capacity refers to the human resources that could either make or break the policy objective. More specifically, capacity means the skills, knowledge and competencies implementers need to carry out the new policy. Teachers and school leaders are at the centre of any attempt to improve the quality of education. Decades of research have found that teachers and school leaders shape the quality of instruction, which strongly affects students' learning and outcomes (OECD, 2019[67]; Barber and Mourshed, 2010[68]; Darling-Hammond, 2017[69]). Like anywhere else, Wales' new curriculum and assessment arrangements can only be successfully implemented if the teachers, teaching staff and other actors of learning have the adequate capacity to turn the policy into reality.

Wales has approximately 25 802 qualified teachers in service, 1 538 head teachers (school leaders who are teachers themselves and can also perform class duties) (Welsh Government, 2019[70]) and other leadership team members, as well as support staff. All these staff will be required to have a high degree of knowledge to develop and shape the new curriculum at their school. Currently, teachers and school leaders graduate with a Bachelors' Degree, a Qualified Teacher Status (QTS) and school leaders must go through a National Professional Qualification for Headship (NPQH). In addition, in Wales support staff make up half (50%) of total full time equivalent staff in schools. Most of the support staff help students learn: higher level teaching assistants, teaching assistants, foreign language assistants, special needs support staff. They are not currently required to have specific qualifications, although as part of the 2017 action plan, the Welsh Government updated teaching assistant standards to better recognise high-level teaching assistants.

Evidence on what competencies teachers need to develop to teach a future-oriented curriculum, such as Wales' new curriculum, is an emerging field. Existing research, countries' experience and the interviews the OECD team conducted with stakeholders suggest those competencies should include curriculum design, professional collaboration, formative assessment practices and meaningful feedback, and teaching students with special needs and multiple backgrounds [(OECD, 2019[67]) and OECD interviews)]. A first observation from international literature is that "professional competence", like the global competence aimed for students to develop, is based on the integration of knowledge (both content and pedagogical), skills, attitudes and motivation, and the ability to apply all of the above to highly complex and demanding situations. It follows from this conceptualisation of professional competence that the ability to solve work-related problems requires having, not only the cognitive abilities for developing effective solutions (i.e. pedagogical knowledge), but also the right motivation and attitudes (OECD, 2019[67]).

As schools start developing and implementing their curriculum, it is important that Wales keep abreast of ongoing research and innovation in pedagogical practices. The frequent and widespread use of high-leverage pedagogies is also an important element of teaching quality. Practices involving cognitive activation (instructional activities that require students to evaluate, integrate and apply knowledge within the context of problem-solving) are positively related to student learning and achievement (Echazarra et al., 2016[71]; Le Donné, Fraser and Bousquet, 2016[72]). Indeed, these practices can challenge and motivate students, and stimulate higher-order skills, such as critical thinking, problem-solving and decision-making. Teachers implementing these practices not only encourage students to find creative and alternative ways to solve problems, but also enable them to communicate their thinking processes and results to their peers and teachers. Yet such teaching practices tend to be less widespread across the OECD (OECD, 2019[67]).

Professional collaboration among teachers in a school is also promoted as a necessary process at school level and across schools. According to PISA results (OECD, 2016[63]), on average across OECD countries, teachers' collaboration has proven to be positively associated with student performance in science, after accounting for the socio-economic profile of both the students and the schools. According to the OECD's Teaching and Learning International Survey (TALIS) results (OECD, 2014[73]), having a collaborative culture within the school is one of the factors that shows the strongest association with teachers' self-efficacy and job satisfaction. Other quality processes include teachers' active engagement with students, teachers giving meaningful feedback to students about their school work, and the cultivation of a safe, respectful and supportive environment (OECD, 2018[74]).

There has been no systematic appraisal of the overall quality and specific competencies of Wales' teachers. Several reports had concluded that by 2017, the education workforce in Wales was not prepared to undertake the implementation of the new curriculum. The conclusions were based on teachers' perception of their own preparedness, on self-assessment of their skills and how it matched the upcoming reforms, and on an evaluation of the provision of teacher education and continuous professional development

(National Assembly for Wales Children, 2017[75]; Furlong, 2015[76]). These reports offered insightful recommendations to enhance both initial teacher education, professional learning, and the direct initiatives intended to support implementation of the curriculum. The Welsh Government acknowledged most of these recommendations, publishing new professional standards, reforming initial teacher education, and developing a National Approach to Professional Learning (professional development) in 2018.

More recent surveys focused on the new curriculum suggest that government and consortia efforts have borne fruit, with a significant increase in the number of practitioners who felt ready and able to implement the new curriculum. For instance, a readiness for change survey led by the Welsh Government in 100 schools across the country yielded 800 responses from practitioners, of which more than 75% declared they "have the capabilities that are needed to put curriculum change into practice". These remain declaration data, however, and should be taken as such, as the survey sample was not statistically representative of the characteristics of practitioners across Wales. The OECD team interviewed several school practitioners, all of whom expressed their willingness to implement the curriculum. Some were also displaying some of the promising teaching processes and qualities suggested in the literature for this new type of curriculum.

A large number of stakeholders interviewed, including experts in curriculum and teaching practices, suggested there was need for more time and more targeted professional learning in order for teachers in Wales to be ready for implementation. For instance, curriculum design is a new requirement created with the curriculum reform, and has therefore not been a skill taught in teacher education programmes. Those schools of the Pioneer network which have designed the new curriculum framework, have highlighted that they have appreciated the opportunity to develop curricula at their level. However, during the assessment visits, teachers told the OECD team that they needed more guidance and found it difficult to find balance between the high degree of freedom and the expectations set out by the Areas of learning. At the heart is the need to build capacity and skills to engage in local curricula development and teaching.

Regarding teacher capacity for student assessment, formative assessments are reported not to be well embedded into teaching practices (Estyn, 2014[77]; OECD, 2014[5]), while the new curriculum places great emphasis on such assessments. The work of the Pioneer schools and other measures proposed in the action plan are important considering long-standing concerns in Wales about the capacity of teachers to conduct quality assessments. The Curriculum and Assessment Pioneer schools, for instance, play a pivotal role in Wales and especially in this case by offering professional learning opportunities that aim to support teachers in the assessment of students' learning against the new curriculum (OECD interviews).

Well-designed guidance and educative curriculum materials can promote teacher learning about the new curriculum and develop their capability while reducing their workload (Cheung and Wong, 2012[78]; Davis and Krajcik, 2005[66]). Educative curriculum materials "speak to" teachers about the ideas underlying the tasks rather than merely guiding their actions (Remillard, 2000, p. 347[79]). They also "educate teachers" while promoting their autonomy (Shkedi, 1998[80]) and support teacher decision making about the adaptation of materials for their own context. They can make the transition to the new curriculum easier by helping teachers integrate their own knowledge with the new curriculum and make connections between theory and their practice, thus reducing the uncertainty and possible anxiety. It should be noted, however, that only providing curriculum material is not enough. Well-designed curriculum guidance should therefore come with professional development to accompany the evolution of ideas and beliefs about the curriculum and ensure better implementation (Roehrig and Kruse, 2005[81]).

School leaders play a crucial role both in policy reform and in daily pedagogical and administrative management of the schools (Pont, 2017[82]). Especially, with the degree of agency, or autonomy, required with the new curriculum, capable and well-trained school leaders are key actors of the success of the Curriculum for Wales. School leaders are a cornerstone of schools' pedagogical success and of teachers' capacity (OECD, 2019[67]; Hopkins, Nusche and Pont, 2008[83]), which they support in various ways. For instance, school leaders can develop or adapt "smart tools" based on sound research to improve teaching and learning (Robinson, Hohepa and Lloyd, 2015[84]). They become even more important as the curriculum requires more collaboration to ensure the spread of curriculum expertise, stronger pedagogical leadership, and broader strategic involvement of the school through local design. School leaders promote participation in professional learning; they offer opportunities for others to participate in decision-making; and they help create and maintain collaborations within and between schools and other stakeholders. The Schools as Learning Organisations survey conducted in Wales for a previous OECD assessment suggested that in almost two thirds of the schools surveyed (67%), school leaders were building learning leadership among the teaching staff (OECD, 2018[20]).

Wales acknowledges the importance of leadership for the success of its new curriculum, which school leaders and other stakeholders in leadership positions appreciate even if there is a need for more support. The OECD has encouraged Wales' continued effort in improving the quality of its school leaders over the years (OECD, 2018[20]; OECD, 2017[54]). The creation of a dedicated National Academy for Educational Leadership, charged with promoting leadership throughout the system, is just one example of this commitment. A readiness for change survey conducted by the Welsh Government showed that only five of the 120 (4%) head teachers and other senior leaders who responded were unsure about their capabilities to put the curriculum change in practice (Welsh Government, 2019[85]). Based on further observations by the OECD team and independent studies, it would seem that head teachers are generally very supportive of their teams regarding preparation for the upcoming curriculum, but the capabilities of leaders, teachers, and teaching assistants seem to vary significantly, and could require more support (Estyn, 2018[55]; Wavehill, 2019[86]).

Wales has already set in motion a professional learning programme with a focus on supporting teachers and school leaders to be able to deliver the new curriculum. At the time of writing this report, the Welsh Government reported having granted to the professional learning agenda funding of GBP 24 million for 18 months. The professional learning activities consist of events organised by the Welsh Government and at consortium level. It is reported that most of the regular professional learning offer is catalogued and facilitated by regional consortia, although some courses are national. The OECD team was informed that the Welsh Government is supportive of education professionals taking time to develop professionally, but the logistics of freeing up time, finding replacements if needed, and getting to the physical locations of courses when needed can make it difficult for teaching and leadership staff to access professional learning. The way this professional learning approach is implemented will be key to the success of the Curriculum across all schools in Wales.

Ensuring equity

Can the Curriculum for Wales help improve learning outcomes of students with different learning needs and, more generally, of students in all schools across Wales? Reducing inequity in education remains a concern of the Welsh Government, as in other education systems. The Government expressed a strong commitment to equity in education and student well-being, including it as one of the four enabling objectives of the "national mission" (Welsh Government, 2017[2]) and implementing various policies such as those supporting the Pupil Development Grant and free school meals. Wales still faces a number of equity

challenges in education, both between and within schools (OECD, 2018[20]). Two main possible issues arise regarding equity in light of the new Curriculum for Wales. First, there is a question of how and under what conditions the new curriculum can reduce inequity. The second question looks at the possible variations in implementation from one school to the next, and how to avoid widening the gap in student outcomes between schools.

Systematic learning disadvantages are often studied in terms of the impact of students' socio-economic background, immigrant origins or special learning needs. Child poverty and learning, and additional learning needs (as referred to in Wales) are the two main concerns dealt with in this report. Disadvantaged students face a variety of barriers to learning among which: fewer educational resources at home, higher risk for parents not to have the time to engage with their children, and dependence on free public education. These results emphasise the importance of identifying the specific inequities faced by disadvantaged children, both during early stages of development and outside the classroom during compulsory schooling. Some policies and practices can reduce this gap, yet sometimes practices at school level can create more discrepancies between schools (OECD, 2019[87]).

Wales is the only nation in the United Kingdom where child poverty was on the rise from previous years, reaching 29% in 2019 and resulting in an increase in the percentage of students eligible for free school meals (18.3%) (Welsh Government, 2019[88]; Welsh Government, 2019[70]). Inequity in the Welsh system is around the average according to PISA data (OECD, 2016[6]). Similarly to other OECD countries, privileged students tend to outperform underprivileged pupils at all levels of education in Wales, although the gap is relatively small by international standards (Sizmur et al., 2019[89]; OECD, 2018[20]). In PISA 2018, students with a higher index of economic, social and cultural status (ESCS) scored on average 49 points higher in reading than more disadvantaged students, a significantly smaller gap than the OECD average (89 points). The OECD estimates that an education system could be considered equitable if 25% of students with a lower ESCS index scored among the top quarter of all students in a given country. Wales is currently at 13% of such academically resilient students, higher but not significantly different than the OECD average (OECD, 2018[90]). On the basis of the proportion of students receiving free school meals (FSM), a Welsh measure of inequalities, the gap in reading scores between FSM and non-FSM students was 34 points (Sizmur et al., 2019[89]).

As with every education policy, it is essential to consider what the Curriculum for Wales entails in terms of equity. Very little research shows the impact of adopting a new curriculum on learning outcomes of lower-performing students and on the reduction of the attainment gap (OECD, 2018[90]; OECD, 2013[91]). Some of the characteristics of the Curriculum for Wales are coherent with the literature. The new curriculum aspires to offer equal opportunities for learning to every child. It is designed to help all students, including those with additional learning needs, on the path to achieve the four purposes. When specifically asked how the new curriculum could help students at a learning disadvantage, stakeholders mention the possibility for teachers to offer a more flexible and relevant curriculum centred on the learner, its focus on well-being for all, and the emphasis on individualised rather than standard-led progression [(Newton, Power and Taylor, 2019[92]) and OECD interviews]. One of the main principles of the new curriculum is to offer a more diverse and experiential learning experience to all learners. This is compelling considering that, with regular curricula, some students especially from poorer socio-economic backgrounds, are less likely to participate in out-of-school experiences, thus missing out on learning opportunities and potentially widening the socio-economic attainment gap.

As the new curriculum aims to address every learner's needs, it also falls in with Wales' policy to support any child's additional learning needs. Wales has been working on implementing the Additional Learning Needs (ALN) Act since January 2018. The Act transforms the perception of what learning needs entail and who can benefit from the support, since any child can require to benefit from the support of an ALN staff in order to address a misunderstanding, a more profound learning deficiency, or another issue, whether temporary or lasting, which would hinder their learning.

The OECD team and other studies have noted, however, that Wales' strong commitment to equity signalled in the policy rhetoric is not yet evident in curriculum discussions and initiatives more widely. A recent study co-ordinated by Cardiff University found some causes for concern with which the OECD team concurs (Newton, Power and Taylor, 2019[92]). First, most discussions on the curriculum's implications for equity systematically refer to the assumption that the curriculum will benefit every child because it has been designed as such. Stakeholders from all parts of the system are nevertheless unclear about the measures that will need to be taken to ensure increased equity results from the curriculum and, in particular, their role in that effort. This requires addressing, considering that for any education policy to successfully enhance equity, it is essential that all key stakeholders have a clear and purposeful focus on equity (OECD, 2012[93]).

When probed on the topic, various stakeholders, including practitioners and education scholars, acknowledged that a non-prescribed, flexible curriculum framework could present a risk for disadvantaged students and slower learners to fall behind. Without conscious monitoring and purposeful focus on equity, it is possible for flexible, child-centred curriculum models to generate slightly different curricula for more and less advantaged students (Power et al., 2018[94]; Harlen, 2015[47]). An observational study on Wales' Foundation Phase, which shares some similarities with the new curriculum for students 5-15 years old, showed that pre-schools with higher levels of socio-economic disadvantage tended to offer a curriculum emphasising basic skills and covering fewer areas of learning (Taylor et al., 2015[95]). The risk also exists at the level of the school, if students get sorted based on abilities without seeking to raise their ambitions, which is especially detrimental to disadvantaged students (OECD, 2019[87]).

An additional concern exists around possible inequalities arising between schools as they start implementing the new curriculum. Schools in different contexts may face different challenges in realising the new curriculum. These differences can result from factors relating to schools' resources, the socio-economic profile of the student population they serve, their general school performance as emphasised in self- and Estyn evaluations, and their degree of engagement in the process of curriculum co-construction. The OECD team was informed that several mechanisms are being piloted throughout Wales in order to assess schools' degree of readiness for the new curriculum, including the readiness for change survey piloted by the Welsh Government in the last quarter of 2019, and surveys at regional level. These tools could allow for a better picture of which schools are most in need of support for implementation and in what areas. The Welsh Government is also investing unprecedented amounts of resource in getting the system ready to implement the new curriculum. This investment aims to benefit all schools either immediately, such as with the additional In-service Training (Inset) day, or in the future, with, for instance, a large investment planned for professional learning and teacher education. Pioneer and Innovation schools have also received specific funding to support their engagement in co-constructing and testing the curriculum.

Social networks are set to play a significant role to help schools commit and build their expertise of the new curriculum. Pioneer schools' experience is aimed to create economies of scale in the implementation process, investing in a few schools' trial-and-error to share knowledge and enhance the quality of the curriculum for all schools. The OECD team observed, however, that many stakeholders argue this experience and these resources give Pioneer schools an advantage, which some of the more

disadvantaged schools will struggle to catch up with. Pioneer and Innovation schools acknowledged that the extra funding they received was a decisive factor in their ability to experiment with the curriculum, including paying for curriculum activities and replacements during teachers' professional learning. Welsh Government officials report progress in exploring systematic collaboration between Pioneer and Innovation schools with other schools, aiming for more schools to have the possibility to share experiences and best practices[(Wavehill, 2019[86]) and OECD interviews]. This focus on collaboration is to be commended given the insights from research on the role of networks in the success of education reform efforts (Liou et al., 2015[96]; Siciliano et al., 2017[33]).

Securing resources and timing

The new curriculum comes with some concerns regarding inequalities, therefore, equity should be placed at the forefront when considering its development and implementation. To prevent inequalities from increasing with this new curriculum, schools in need of support and local authorities might require special focus throughout implementation, on top of the Welsh Government's existing policies. The amount, quality and distribution of resources allocated to implementation, determine to a great extent whether and how a policy is implemented (OECD, 2010[97]). A recurring issue with resources is not only about whether they are available for implementation, or in sufficient quantities, but how they are used, and what for (OECD, 2015[15]). There is a threshold level of funding below which implementing institutions (e.g. governmental agencies) will not be able to achieve the implementation goals they were allocated (Viennet and Pont, 2017[3]). Using multiple funding sources and setting additional funding for specific measures of a policy can be determinant in early implementation stages (Gage et al., 2014[98]).

The OECD team and other observers have highlighted the issue of school funding in previous assessments of the Welsh system (National Assembly for Wales Children, 2019[99]; OECD, 2018[20]). The Welsh Government responded in 2019 by commissioning an independent study to assess the amount of funding necessary to fund schools in Wales, especially considering the costs incurred by the ongoing reforms (Welsh Government, 2019[100]). The funding of education and schools in Wales is a topic for ongoing debate more broadly, as there are complexities and disparities observed from one local authority to the next. The new curriculum has considerable potential to help students achieve better outcomes. However, all schools and children will not benefit equally unless these concerns are acknowledged across the system and tackled from the beginning of the implementation process.

Wales invested unprecedented resources in reforming the curriculum, as reported by the Welsh Government: it estimated having committed GBP 40 million overall by the summer 2019, and more specifically, GBP 24 million over 18 months to fund and renew professional learning (OECD interviews). It is difficult to judge the feasibility of the curriculum reform with current information but some initial studies (Newton, Power and Taylor, 2019[92]) give elements to believe that without extra funding and human resources, non-Pioneer schools will have difficulties adapting and implementing the curriculum, even starting from 2022. It will be important to ensure that there are long-term resources to realise the new curriculum, as schools will require sufficient and sustainable resources to be able to adapt and shape the new curriculum to provide the type of learning trajectories for students based on their local needs. In this regard, the upcoming school funding review should be instrumental in informing resource planning for implementation of the curriculum.

Significant efforts were also made on adapting the timing of the reform. In 2017, the Minister for Education in the Welsh Government announced that implementation of the curriculum would be given more time and would be sequenced by classes of age over several years, as opposed to the so-called "big bang" approach

initially selected (Welsh Government, 2017[101]). More precisely, instead of having to implement the curriculum for all classes of age starting in September 2021, schools will have 2.5 years (between January 2020 and September 2022) to familiarise themselves with the new curriculum before officially introducing it. In this way, September 2022 marks the beginning of implementation of the new curriculum, as it will be compulsory only for the classes between nursery levels and Year 7 (corresponding to early childhood, primary and the first year of lower secondary education). The Welsh Government further plans for the curriculum to be rolled-out for the upper classes (Years 8 to 11) between 2023 and 2026, at a rate of one class per year (Welsh Government, 2017[2]).

The ministerial decision to roll out the curriculum was well received in Wales, as it displayed a long-term commitment to the reform that could go beyond political cycles, and took some pressure off schools and other stakeholders to implement. Giving some time to implementation is globally well perceived in the literature and in international experience on policy and curriculum change (Viennet and Pont, 2017[3]; Tichnor-Wagner, 2019[102]). This translates, for instance, into more time for teachers and school leaders to adjust to the new curriculum before expecting full implementation, which is crucial for these reforms to be sustained (Tikkanen et al., 2017[103]). This time to get ready is especially important in the case of Wales, since teachers and school leaders also become curriculum designers.

Conclusions

Wales has successfully mapped out its policy plan to move away from a highly prescriptive national curriculum, to one that focuses on the future, adapted to learners' diverse needs and puts the teachers and principals back into positions of leaders of learning and teaching. The policy vision is clear and looks to the long term. The new curriculum framework aspires to best practices in terms of 21st century learning, and affords high levels of agency for all stakeholders. The curriculum reform was developed as part of a wider reform agenda including key complementary policies for its implementation, and the Welsh Government and other system leaders are building support for schools.

When analysing next steps, the challenge for Wales is mainly to remain true to the vision but shift the perspective of the strategy from being policy-driven to one focused on schools. More concretely, several areas have been highlighted that could interfere with the effective realisation of the curriculum. There appears to be a lack of deep understanding of what successful realisation of the curriculum might look like in practice. This can imply lack of understanding of the "statement of what matters" or of the principles of the new curriculum. Additionally, new approaches for assessment for learning and pedagogy will be important for teachers and schools to support student progress with the new curriculum.

For schools, there may be a range of challenges that need careful consideration in terms of their role in designing their own curriculum and for equity considerations. Designing curriculum relies on the development of specific capabilities which will be required across the system, as well as time for schools and their staff to undertake this. Schools will also need to plan effective transitions from the old to the new curriculum. There are risks of inequalities increasing across Wales due to the flexibility of the new curriculum. Some schools may also encounter additional challenges to design and implement the new curriculum unless they have the appropriate support. This can be exacerbated if there is lack of clarity in resources available for schools to be able to adapt and shape the new curriculum to their local needs and over the longer term.

To move forward, Wales can consider first developing a shared understanding of what successful realisation of the curriculum looks like on the ground. Such understanding should then help to initiate better

coherence both within the curriculum and between policy initiatives; inform initiatives to develop capabilities across the system; clarify which resources are needed and where; and define useful indicators and targets to monitor the reform's progress. For the next steps in the implementation strategy, the OECD team suggests to provide support for the realisation of the curriculum across all schools in Wales.

This chapter has presented a detailed analysis of the Curriculum for Wales and its progress, as well as resource, capacity and equity considerations that will need to be considered to contribute to success with the implementation of the Curriculum for Wales. It will be crucial for Wales to develop a shared understanding of what the curriculum means for schools and to provide support for its realisation across all schools in Wales. Building on the analysis developed in this chapter and the following ones, Chapter 5 develops and weaves together a set of concrete recommendations and actions for a coherent implementation strategy to ensure the Curriculum for Wales reaches schools and classrooms.

Notes

[1] Welsh Government officials specified to the OECD team that provision of early childhood education and care is not yet an integrated system in Wales, as a variety of school and other settings provide education and care to young children following different models. They reported that integration could be an ambition for the future.

[2] The educational settings providing early childhood education and care are not expected to manage their own assessment, nor to design their own curriculum, as national arrangements will be published later (Welsh Government, 2020[17]).

References

Aitken, G. (2006), "Signalling shifts in meaning: the experience of social studies curriculum design", *Curriculum Matters* 2, pp. 6-25, https://www.nzcer.org.nz/nzcerpress/curriculum-matters/articles/signalling-shifts-meaning-experience-social-studies (accessed on 6 January 2020). [25]

Aitken, G. (2005), *Curriculum Design in New Zealand Social Studies: Learning from the Past*, The University of Auckland, https://researchspace.auckland.ac.nz/handle/2292/22856 (accessed on 12 December 2019). [24]

Barber, M. and M. Mourshed (2010), *Shaping the future: How good education systems can become great in the decade ahead. Report on the International education roundtable, 7 July 2009, Singapore*, Higher School of Economics, Moscow, https://EconPapers.repec.org/RePEc:nos:voprob:2010:i:3:p:6-31 (accessed on 3 January 2020). [68]

Bergsmann, E. et al. (2015), "Evaluation of competence-based teaching in higher education: From theory to practice", *Evaluation and Program Planning*, Vol. 52, pp. 1-9, http://dx.doi.org/10.1016/j.evalprogplan.2015.03.001. [36]

Chalmers, C. et al. (2017), "Implementing "big ideas" to advance the teaching and learning of science, technology, engineering, and mathematics (STEM)", *International Journal of Science and Mathematics Education*, Vol. 15/1, pp. 25-43, http://dx.doi.org/10.1007/s10763-017-9799-1. [49]

Charles, R. (2005), "Big ideas and understandings as the foundation for elementary and middle school mathematics", *NCSM Journal of Mathematics Education Leadership*, Vol. 8/1, pp. 9-24, https://www.mathedleadership.org/resources/journalsvol8.html (accessed on 3 January 2020). [46]

Cheung, A. and P. Wong (2012), "Factors affecting the implementation of curriculum reform in Hong Kong: Key findings from a large-scale survey study", *International Journal of Educational Management*, Vol. 26/1, pp. 39-54, http://dx.doi.org/10.1108/09513541211194374. [78]

Coburn, C. (2001), "Collective sensemaking about reading: how teachers mediate reading policy in their professional communities", *Educational Evaluation and Policy Analysis*, Vol. 23/2, pp. 145-170, http://dx.doi.org/10.3102/01623737023002145. [34]

Darling-Hammond, L. (2017), "Teacher education around the world: What can we learn from international practice?", *European Journal of Teacher Education*, Vol. 40/3, pp. 291-309, http://dx.doi.org/10.1080/02619768.2017.1315399. [69]

Davis, E. and J. Krajcik (2005), "Designing educative curriculum materials to promote teacher learning", *Educational Researcher*, Vol. 34/3, pp. 3-14, http://www.jstor.org/stable/3700012. [66]

Donaldson, G. (2015), *Successful Futures: An Independent Review of Curriculum and Assessment Arrangements in Wales*, Welsh Government, Cardiff, UK, https://gov.wales/sites/default/files/publications/2018-03/successful-futures.pdf (accessed on 12 December 2019). [1]

Echazarra, A. et al. (2016), "How teachers teach and students learn: Successful strategies for school", *OECD Education Working Papers*, No. 130, OECD Publishing, Paris, https://dx.doi.org/10.1787/5jm29kpt0xxx-en. [71]

Estyn (2018), *The annual report of her Majesty's Chief Inspector of Education and Training in Wales 2016-2017*, Estyn, Cardiff, https://www.estyn.gov.wales/sites/www.estyn.gov.wales/files/documents/Estyn_Annual%20Report_2018_English_Accessible.pdf. [55]

Estyn (2014), *The annual report of HM Chief Inspector of Education and Training in Wales 2013-2014*, Estyn, Cardiff, https://www.estyn.gov.wales/sites/www.estyn.gov.wales/files/documents/The_Annual_Report_of_Her_Majestys_Chief_Inspector_of_Education_and_Training_in_Wales_2013-2014.pdf (accessed on 3 January 2020). [77]

Finnish National Agency for Education (OPH) (2016), *National core curriculum for basic education 2014*, Finnish National Agency for Education, Helsinki, https://verkkokauppa.oph.fi/EN/page/product/national-core-curriculum-for-basic-education-2014/2453039. [44]

Fullan, M. (2015), *The NEW meaning of educational change*, Teachers College Press, New York. [4]

Fullan, M., D. Hopkins and J. Spillane (2008), "Curriculum implementation and sustainability", in *The SAGE Handbook of Curriculum and Instruction*, SAGE Publications Inc., http://dx.doi.org/10.4135/9781412976572.n6. [61]

Furlong, J. (2015), *Teaching tomorrow's teachers - Options for the future of initial teacher education in Wales*, Welsh Government, Cardiff, https://gov.wales/sites/default/files/publications/2018-03/teaching-tomorrow%E2%80%99s-teachers.pdf (accessed on 3 January 2020). [76]

Gage, N. et al. (2014), "Funding Support for School-Wide Positive Behavioral Interventions and Support Implementation and Scale-Up", *Journal of Disability Policy Studies*, Vol. 25/3, pp. 164-174, http://dx.doi.org/10.1177/1044207313488943. [98]

Government of British Columbia (2019), *Curriculum and Assessment - Province of British Columbia Website*, Government of British Columbia Website, https://www2.gov.bc.ca/gov/content/education-training/k-12/teach/curriculum (accessed on 12 December 2019). [42]

Halinen, I. (2018), "The new educational curriculum in Finland", in Matthes, M. et al. (eds.), *Improving the quality of childhood in Europe*, Alliance for Childhood European Network Foundation, Brussels, http://www.allianceforchildhood.eu/files/Improving_the_quality_of_Childhood_Vol_7/QOC%20V7%20CH06%20DEF%20WEB.pdf. [65]

Hargreaves, A. and D. Fink (2006), *Sustainable leadership*, Wiley, Hoboken, NJ. [60]

Hargreaves, A. and D. Shirley (2009), *The fourth way : the inspiring future for educational change*, Corwin Press. [22]

Harlen, W. (ed.) (2015), *Working with big ideas of science education*, The Interacademy Partnership, Trieste, https://www.interacademies.org/26703/Working-with-Big-Ideas-of-Science-Education. [47]

Harlen, W. (ed.) (2010), *Principles and big ideas of science education*, Association for Science Education, Hatfield, https://www.ase.org.uk/bigideas (accessed on 3 January 2020). [45]

Hopkins, D., D. Nusche and B. Pont (eds.) (2008), *Improving School Leadership, Volume 2: Case Studies on System Leadership*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264039551-en. [83]

Kelly, A. (2004), *The curriculum: theory and practice*, Sage Publications, https://eric.ed.gov/?id=ED488813 (accessed on 3 January 2020). [62]

Le Donné, N., P. Fraser and G. Bousquet (2016), "Teaching Strategies for Instructional Quality: Insights from the TALIS-PISA Link Data", *OECD Education Working Papers*, No. 148, OECD Publishing, Paris, https://dx.doi.org/10.1787/5jln1hlsr0lr-en. [72]

Liou, Y. et al. (2015), "Foregrounding the role of relationships in reform: A social network perspective on leadership and change", *International Journal of Educational Management*, Vol. 29/7, pp. 819-837, http://dx.doi.org/10.1108/IJEM-05-2015-0063. [96]

Looney, J. (2011), "Alignment in Complex Education Systems: Achieving Balance and Coherence", *OECD Education Working Papers*, No. 64, OECD Publishing, Paris, https://dx.doi.org/10.1787/5kg3vg5lx8r8-en. [56]

Magee, J. and B. Jensen (2018), *Overcoming challenges facing contemporary curriculum. Lessons from British Columbia*, Learning First, https://learningfirst.com/wp-content/uploads/2018/11/Overcoming-challenges-facing-contemporary-curriculum-Lessons-from-British-Columbia.pdf (accessed on 12 December 2019). [43]

Mulder, M. (2001), "Competence development - some background thoughts", *The Journal of Agricultural Education and Extension*, Vol. 7/4, pp. 147-158, http://dx.doi.org/10.1080/13892240108438822. [39]

National Assembly for Wales Children, Y. (2019), *School Funding in Wales*, National Assembly for Wales, Cardiff, https://www.assembly.wales/laid%20documents/cr-ld12643/cr-ld12643-e.pdf (accessed on 3 January 2020). [99]

National Assembly for Wales Children, Y. (2017), *Report on the teachers' professional learning and education inquiry*, National Assembly for Wales, Cardiff, https://www.assembly.wales/laid%20documents/cr-ld11338/cr-ld11338-e.pdf (accessed on 3 January 2020). [75]

New Zealand Government (2010), *Underlying principles of assessment for learning - Te Kete Ipurangi*, Te Kete Ipurangi - The Knowledge Basket, http://assessment.tki.org.nz/Assessment-for-learning/Underlying-principles-of-assessment-for-learning (accessed on 3 January 2020). [57]

Newton, N., S. Power and C. Taylor (2019), *Successful futures for all: exploration of curriculum reform*, Cardiff University, Cardiff, https://wiserd.ac.uk/publications/successful-futures-all-explorations-curriculum-reform. [92]

Nieveen, N. and W. Kuiper (2012), "Balancing Curriculum Freedom and Regulation in the Netherlands", *European Educational Research Journal*, Vol. 11/3, pp. 357-368, http://dx.doi.org/10.2304/eerj.2012.11.3.357. [59]

OECD (2019), *Education Policy Outlook 2019: Working Together to Help Students Achieve their Potential*, OECD Publishing, Paris, https://dx.doi.org/10.1787/2b8ad56e-en. [16]

OECD (2019), *OECD Future of Education and Skills 2030 Conceptual learning framework*, OECD Publishing, Paris, http://www.oecd.org/education/2030-project/teaching-and-learning/learning/all-concept-notes/. [38]

OECD (2019), *OECD Future of Education and Skills 2030 Conceptual learning framework - Concept note: Knowledge for 2030*, OECD Publishing, Paris, http://www.oecd.org/education/2030-project/teaching-and-learning/learning/knowledge/Knowledge_for_2030_concept_note.pdf. [48]

OECD (2019), *OECD Future of Education and Skills 2030 Conceptual learning framework - Concept note: OECD Learning Compass 2030*, http://www.oecd.org/education/2030-project/teaching-and-learning/learning/learning-compass-2030/OECD_Learning_Compass_2030_concept_note.pdf (accessed on 12 December 2019). [19]

OECD (2019), *PISA 2018 Results (Volume II): Where All Students Can Succeed*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/b5fd1b8f-en. [87]

OECD (2019), "Results for regions within countries", in *PISA 2018 Results (Volume I): What Students Know and Can Do*, OECD Publishing, Paris, https://dx.doi.org/10.1787/bad603f0-en. [7]

OECD (2019), *TALIS 2018 Results (Volume I): Teachers and School Leaders as Lifelong Learners*, TALIS, OECD Publishing, Paris, https://dx.doi.org/10.1787/1d0bc92a-en. [67]

OECD (2018), *Curriculum flexibility and autonomy in Portugal An OECD review*, OECD, Paris, https://www.oecd.org/education/2030/Curriculum-Flexibility-and-Autonomy-in-Portugal-an-OECD-Review.pdf (accessed on 5 September 2018). [64]

OECD (2018), *Developing Schools as Learning Organisations in Wales*, Implementing Education Policies, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264307193-en. [20]

OECD (2018), *Diagram of the education systems in the United Kingdom*, Education GPS, https://gpseducation.oecd.org/CountryProfile?primaryCountry=GBR (accessed on 4 February 2020). [51]

OECD (2018), *Equity in Education: Breaking Down Barriers to Social Mobility*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264073234-en. [90]

OECD (2018), *Teaching for the Future: Effective Classroom Practices To Transform Education*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264293243-en. [74]

OECD (2018), *The future of education and skills -Education 2030*, OECD Publishing, Paris, http://www.oecd.org/education/2030/E2030%20Position%20Paper%20(05.04.2018).pdf (accessed on 4 September 2018). [12]

OECD (2017), *The Welsh Education Reform Journey: A rapid policy assessment*, OECD Publishing, Paris, http://www.oecd.org/education/The-Welsh-Education-Reform-Journey.pdf (accessed on 3 January 2020). [54]

OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264266490-en. [6]

OECD (2016), *PISA 2015 Results (Volume II): Policies and Practices for Successful Schools*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264267510-en. [63]

OECD (2015), *Education Policy Outlook 2015: Making Reforms Happen*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264225442-en. [15]

OECD (2014), *Improving Schools in Wales: An OECD Perspective*, OECD publishing, Paris, http://www.oecd.org/education/Improving-schools-in-Wales.pdf (accessed on 12 December 2019). [5]

OECD (2014), *PISA 2012 Results: What Students Know and Can Do (Volume I, Revised edition, February 2014): Student Performance in Mathematics, Reading and Science*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264208780-en. [8]

OECD (2014), *TALIS 2013 Results: An International Perspective on Teaching and Learning*, TALIS, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264196261-en. [73]

OECD (2013), "Policy Implications of Equity in Education", in *PISA 2012 Results: Excellence through Equity (Volume II): Giving Every Student the Chance to Succeed*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264201132-10-en. [91]

OECD (2013), *Synergies for Better Learning: An International Perspective on Evaluation and Assessment*, OECD Reviews of Evaluation and Assessment in Education, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264190658-en. [11]

OECD (2012), *Equity and Quality in Education: Supporting Disadvantaged Students and Schools*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264130852-en. [93]

OECD (2010), *Improving schools: strategies for action in Mexico*, OECD, Paris, https://www.oecd.org/education/school/improvingschoolsstrategiesforactioninmexico.htm (accessed on 29 August 2017). [97]

OECD (2010), *PISA 2009 Results: What Students Know and Can Do: Student Performance in Reading, Mathematics and Science (Volume I)*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264091450-en. [9]

OECD (2007), *PISA 2006: Science Competencies for Tomorrow's World: Volume 1: Analysis*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264040014-en. [10]

Pietarinen, J., K. Pyhältö and T. Soini (2017), "Large-scale curriculum reform in Finland – exploring the interrelation between implementation strategy, the function of the reform, and curriculum coherence", *The Curriculum Journal*, Vol. 28/1, pp. 22-40, http://dx.doi.org/10.1080/09585176.2016.1179205. [32]

Pont, B. (2017), *Education reforms: school leadership in comparative perspective*, Universidad Complutense Madrid. [82]

Power, S. et al. (2018), "How child-centred education favours some learners more than others", *Review of Education*, Vol. 7/3, pp. 570-592, http://dx.doi.org/10.1002/rev3.3137. [94]

Priestley, M. and C. Sinnema (2014), "Downgraded curriculum? An analysis of knowledge in new curricula in Scotland and New Zealand", *The Curriculum Journal*, Vol. 25/1, pp. 50-75, http://dx.doi.org/10.1080/09585176.2013.872047. [50]

Remillard, J. (2000), "Can curriculum materials support teachers' learning? Two fourth-grade teachers' use of a new mathematics", *Elementary School Journal*, Vol. 100/4, pp. 331-350, http://www.jstor.org/stable/1002146. [79]

Robinson, V., M. Hohepa and C. Lloyd (2015), *Shool leadership and student outcomes: Identifying what works and why*, New Zealand Ministry of Education, Auckland, https://www.educationcounts.govt.nz/__data/assets/pdf_file/0015/60180/BES-Leadership-Web-updated-foreword-2015.pdf. [84]

Roehrig, G. and R. Kruse (2005), "The Role of Teachers' Beliefs and Knowledge in the Adoption of a Reform-Based Curriculum", *School Science and Mathematics*, Vol. 105/8, pp. 412-422, http://dx.doi.org/10.1111/j.1949-8594.2005.tb18061.x. [81]

Scheerens, J. (2013), "The use of theory in school effectiveness research revisited", *School Effectiveness and School Improvement*, Vol. 24/1, pp. 1-38, http://dx.doi.org/10.1080/09243453.2012.691100. [58]

Schiro, M. (2008), *Curriculum theory : conflicting visions and enduring concerns*, Sage Publications. [40]

Shkedi, A. (1998), "Can the curriculum guide both emancipate and educate teacher?", *Curriculum Inquiry*, Vol. 38/2, pp. 209-229, https://doi.org/10.1111/0362-6784.00085. [80]

Siciliano, M. et al. (2017), "A cognitive perspective on policy implementation: reform beliefs, sensemaking, and social networks", *Public Administration Review*, Vol. 77/6, pp. 889-901, http://dx.doi.org/10.1111/puar.12797. [33]

Sinnema, C. (2017), "Designing a national curriculum with enactment in mind", University of Auckland, Auckland. [23]

Sinnema, C. (2015), "The Ebb and Flow of Curricular Autonomy: Balance Between Local Freedom and National Prescription in Curricula", in Wys, D., L. Hayward and J. Pandya (eds.), *The SAGE Handbook of Curriculum, Pedagogy and Assessment: Two Volume Set*, SAGE Publications Ltd, http://dx.doi.org/10.4135/9781473921405.n59. [14]

Sinnema, C. (2011), *Monitoring and evaluating curriculum implementation. Final evaluation report on the implementation of the New Zealand curriculum 2008-2009*, The Ministry of Education, Wellington, https://www.educationcounts.govt.nz/publications/curriculum/monitoring-and-evaluating-curriculum-implementation-final-evaluation-report-on-the-implementation-of-the-new-zealand-curriculum-20082009/section-2. [29]

Sinnema, C. and G. Aitken (2011), "Teaching as inquiry in the New Zealand curriculum: origins and implementation", in Parr, J., H. Hedges and S. May (eds.), *Changing trajectories of teaching and learning*, NZCER, Wellington, https://researchspace.auckland.ac.nz/handle/2292/11366 (accessed on 6 January 2020). [30]

Sizmur, J. et al. (2019), *Achievement of 15-year-olds in Wales: PISA 2018 national report*, National Foundation for Educational Research, Slough, https://gov.wales/sites/default/files/statistics-and-research/2019-12/achievement-15-year-olds-program-international-student-assessment-pisa-national-report-2018_0.pdf (accessed on 3 January 2020). [89]

Spillane, J. (2005), "Standards deviation: how schools misunderstand education policy", *CPRE Policy Briefs*, University of Pennsylvania, http://dx.doi.org/10.12698/cpre.2005.rb43. [31]

Spillane, J., B. Reiser and T. Reimer (2002), "Policy implementation and cognition: reframing and refocusing implementation research", *Review of Educational Research*, Vol. 72/3, pp. 387-431, http://dx.doi.org/10.3102/00346543072003387. [26]

Taylor, C. et al. (2015), *Evaluating the Foundation Phase - Final Report*, Welsh Government, Cardiff, https://wiserd.ac.uk/publications/evaluating-foundation-phase-final-report (accessed on 3 January 2020). [95]

Tichnor-Wagner, A. (2019), "Draft Change Management: Facilitating and Hindering Factors of Curriculum Implementation", *OECD Future of Education and Skills 2030: Curriculum analysis*, No. 24, OECD, Paris, http://www.oecd.org/education/2030-project/contact/Change_management_for_curriculum_implementation_Facilitating_and_hindering_factors_of_curriculum_implementation.pdf. [102]

Tikkanen, L. et al. (2017), "Primary determinants of a large-scale curriculum reform: National board administrators' perspectives", *Journal of Educational Administration*, Vol. 55/6, pp. 702-716, http://dx.doi.org/10.1108/JEA-10-2016-0119. [103]

Viennet, R. and B. Pont (2017), "Education policy implementation: A literature review and proposed framework", *OECD Education Working Papers*, No. 162, OECD Publishing, Paris, https://dx.doi.org/10.1787/fc467a64-en. [3]

Wavehill (2019), *Curriculum for Wales 2022 Feedback Analysis*, Wavehill, Cardiff, https://gov.wales/sites/default/files/consultations/2019-10/curriculum-wales-2022-feedback-analysis.pdf (accessed on 12 December 2019). [28]

Wavehill (2019), *Innovation Schools: End-of-phase Reporting Synthesis*, Wavehill, Cardiff, https://gov.wales/sites/default/files/consultations/2019-11/innovation-schools-end-of-phase-reporting-synthesis.pdf (accessed on 12 December 2019). [21]

Wavehill (2019), *School changes and adaptations for curriculum and assessment delivery*, Welsh Government, Cardiff, https://gov.wales/sites/default/files/statistics-and-research/2019-02/school-changes-and-adaptations-for-curriculum-and-assessment-delivery-final-report.pdf (accessed on 3 January 2020). [86]

Weick Sen, K. (1995), *Sensemaking in organisations*, Sage, Thousand Oaks, CA. [35]

Welsh Government (2020), *Curriculum for Wales guidance*, Welsh Government, Cardiff, https://hwb.gov.wales/storage/b44ad45b-ff78-430a-9423-36feb86aaf7e/curriculum-for-wales-guidance.pdf. [17]

Welsh Government (2019), *Assessment within Curriculum for Wales – Supporting learner progression*, Curriculum for Wales Blog, https://curriculumforwales.gov.wales/2019/12/14/assessment-within-curriculum-for-wales-supporting-learner-progression/ (accessed on 3 January 2020). [52]

Welsh Government (2019), *Child poverty progress report 2019*, Welsh Government, Cardiff, https://gov.wales/sites/default/files/publications/2019-12/child-poverty-strategy-2019-progress-report.pdf (accessed on 3 January 2020). [88]

Welsh Government (2019), *Draft Curriculum for Wales 2022 - Assessment proposals to influence the statutory guidance*, Welsh Government, Cardiff, https://hwb.gov.wales/draft-curriculum-for-wales-2022/assessment-and-evaluation-framework/assessment-proposals/ (accessed on 3 January 2020). [53]

Welsh Government (2019), *Draft Curriculum for Wales 2022: April 2019 - Draft statutory guidance area of learning and experience. Humanities*, Welsh Government, Cardiff, https://hwb.gov.wales/draft-curriculum-for-wales-2022/humanities/#supporting-the-four-purposes-of-the-curriculum. [27]

Welsh Government (2019), *Draft statutory guidance - A guide to Curriculum for Wales 2022*, Welsh Government, Cardiff, https://hwb.gov.wales/draft-curriculum-for-wales-2022/a-guide-to-curriculum-for-wales-2022/. [18]

Welsh Government (2019), *School staff readiness for change survey (unpublished)*, Welsh Government, Cardiff. [85]

Welsh Government (2019), *Schools' census results 2019*, Welsh Government, Cardiff, https://gov.wales/sites/default/files/statistics-and-research/2019-07/school-census-results-2019-764.pdf (accessed on 3 January 2020). [70]

Welsh Government (2019), *Terms of reference for a school funding review*, Welsh Government, Cardiff, https://gov.wales/school-funding-review (accessed on 2 February 2020). [100]

Welsh Government (2019), *The Curriculum for Wales – Dispelling the Myths – Part 1*, Curriculum for Wales Blog, https://curriculumforwales.gov.wales/2019/07/26/the-curriculum-for-wales-dispelling-the-myths-part-1/ (accessed on 12 December 2019). [41]

Welsh Government (2017), *Education in Wales: Our national mission - Action plan 2017-21*, https://gov.wales/sites/default/files/publications/2018-03/education-in-wales-our-national-mission.pdf (accessed on 3 January 2020). [2]

Welsh Government (2017), *Ministerial speech. Education in Wales: Our national mission. 2 October 2017*, Welsh Government, Cardiff, https://gov.wales/education-wales-our-national-mission (accessed on 2 February 2020). [101]

Welsh Government (2015), *Qualified for life A curriculum for Wales-a curriculum for life*, OGL, Cardiff, https://dera.ioe.ac.uk/24680/1/151021-a-curriculum-for-wales-a-curriculum-for-life-en_Redacted.pdf (accessed on 5 September 2018). [13]

Wesselink, R. et al. (2010), "Using an instrument to analyse competence-based study programmes: experiences of teachers in Dutch vocational education and training", *Journal of Curriculum Studies*, Vol. 42/6, pp. 813-829, http://dx.doi.org/10.1080/00220271003759249. [37]

3 Building on a strong co-construction process

This chapter analyses the implications of Wales' commitment not only to engage stakeholders in policy making, but also to co-construct the new Curriculum for Wales. Co-construction can help stakeholders get deeply involved in educational change, seeing the new curriculum as a common endeavour to enhance education in Wales. Paired with strategic leadership and support from the Welsh Government, co-construction can contribute to building trust and collaboration between education stakeholders, crucial for the long-term sustainability of the new curriculum. For the next stages, there is a need to review and provide more clarity in roles and responsibilities between the various stakeholders involved in the process, as well as in the support that the Welsh Government and the middle tier can bring to help schools as they put the new curriculum into practice.

Why co-constructing the curriculum?

The drive for co-constructing policies has become characteristic of the Welsh Government's approach to reform. In recent years, the Government attempted to co-construct a number of its education policies in collaboration with key stakeholders, whereas Welsh policy making has in the past followed a more top-down approach (OECD, 2014[1]). Maintaining stakeholder engagement facilitates ownership of the vision and trust in the process, which are key for design, implementation and eventually for the sustainability of policies in the medium and long term (Viennet and Pont, 2017[2]). Stakeholders see their involvement being valued in the policy process, they are more likely to co-operate to shape the policy, to offer constructive criticism, and to contribute to making the policy happen. As stakeholders engage with the policy, they can also help adjust its design to their context, building on their knowledge and experience.

Wales' reform journey has engaged education stakeholders throughout the process, in consultations, in shaping the design of the curriculum, in piloting assessment approaches, and in preparing the terrain for the curriculum to be implemented. The next stage to realise the curriculum across all schools in Wales will require some revisions of the roles and responsibilities of key stakeholders. The country successfully embedded co-construction across the system as a principle of curriculum development and education policy making in general. Stakeholders across the board see the curriculum reform as a shared endeavour, with a considerable number of them strongly committed to making the reform happen.

The next steps for Wales in terms of co-construction and stakeholder engagement are vital if Wales wants to successfully realise the Curriculum for Wales across the country. This will require clarifying the different player's roles and responsibilities in relation to each other, as collaboration will be key to make this curriculum reach its potential. It will also require fully engaging all those who may be waiting to see what are the next steps. The Education Directorate and system leaders have a central part to play, helping all stakeholders build confidence and do their part to change a system while making sure efforts are co-ordinated. If this is not achieved, the risk is that the Curriculum for Wales remains limited to schools which have already been engaged, but does not reach all schools.

An overview of the roles and responsibilities in the Curriculum for Wales

Table 3.1 summarises the roles of the key stakeholders in the development and implementation of the new curriculum.

Table 3.1. Key stakeholders in Wales' curriculum reform

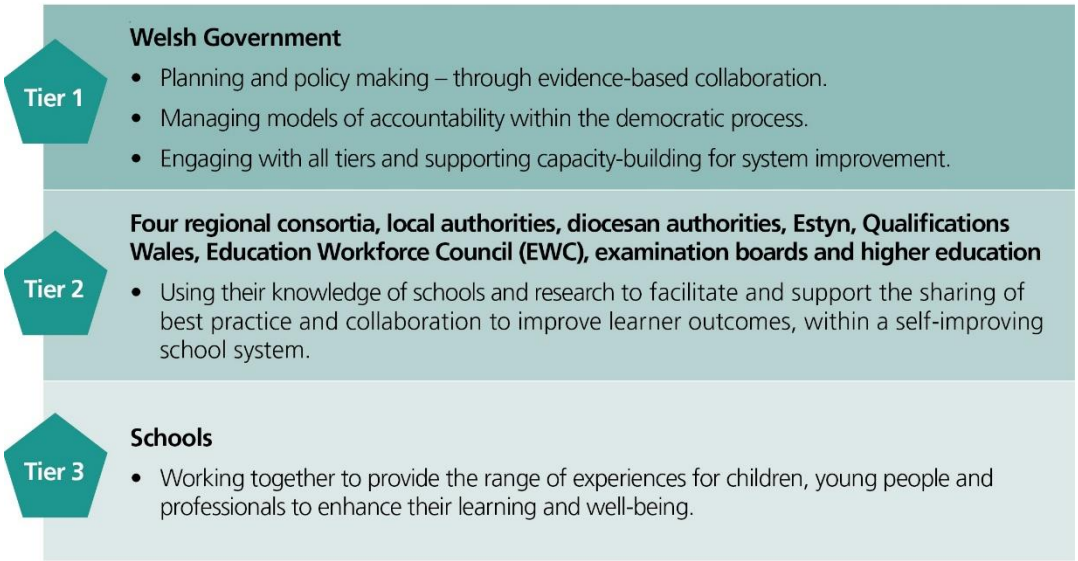
Stakeholder group	Characteristics and roles regarding the new curriculum
Welsh Government's Education Directorate	Highest-level planner and policy maker responsible for administering pre-school and school education.
Regional consortia	Four regional consortia established in 2012 to help local authorities streamline their school improvement services to improve quality and consistency across Wales. Key role to play in helping schools take ownership of and realise the new curriculum, and in ensuring coherence across schools.
Local authorities	22 local authorities responsible for direct allocations of funding to publicly funded schools and for supporting vulnerable students. Members and drivers of the regional consortia, they are just as essential to help schools design local curricula and guarantee balance between local relevance and coherence across schools.

Stakeholder group	Characteristics and roles regarding the new curriculum
Estyn	Her Majesty's Inspectorate for Education and Training in Wales, responsible for inspecting the education system. Main role is to help transition from a high-stakes accountability system to a learning system where accountability practices are based on trust among capable and learning professionals.
Qualifications Wales	Independent regulator of qualifications in Wales (2015), aims to ensure that qualifications and qualifications system are effective and hold public confidence. Leads on the design of new qualifications so they are coherent with the new curriculum.
Education Workforce Council (EWC)	Independent regulatory body (2014) for teachers in public schools and further education institutions responsible for safeguarding the interests of learners, parents and the public; improving and maintaining confidence in the education workforce.
Teacher, head teacher and support staff unions	Independent unions and professional associations for teachers, head teachers and support staff are social partners of the Welsh Government representing their professional member base.
Higher education institutions	The eight Welsh universities take part in the development of the curriculum and in the implementation of recent teacher policy reforms, including the new professional standards, initial teacher education and professional learning. Some are investigating the curriculum reform's process, quality and expected effects.
National Academy for Educational Leadership (NAEL)	Independent organisation established by the Welsh Government (2018) promoting a whole-of-system approach to leadership. Frames Wales' vision for educational leadership and endorses training for leaders.
School governors	School governors are elected members of a school governing board that has a central role in decisions about budgets and recruitment of the school. Members consist of teaching staff, parents, councillors and community representatives.
Teachers	25 802 qualified teachers in service in 2019, expected to teach and to participate in school curriculum design.
School leaders	3 656 school leaders (head teachers, deputies and assistants) among the qualified teachers, expected to lead teachers' collaborative effort to design and realise the new curriculum in their schools.
Support staff	27 101 support staff including 14 979 high-level teaching assistants, special needs and administration staff.
Parents	Parents are involved with the curriculum reform via the national consultation and information sessions at some schools. Their participation is central.
Students	468 000 students in 1 494 maintained schools in Wales (2019). Students are involved in the curriculum reform via focus groups in national consultations, working groups and at their own schools.

Source: Based on qualitative information collected by the OECD team and on Welsh Government school census (2019[3]).

As for any policy, these roles evolve throughout the policy process from design through to implementation. The Welsh education system is organised in three tiers (shown in Figure 3.1). The schools' tier (tier 3) is responsible for making the curriculum happen in classrooms, while the Welsh Government co-ordinates and provides support from tier 1. The middle tier (tier 2) consists of a number of actors with various key responsibilities in the education system. EWC and Qualifications Wales are regulators, while other actors play essential roles in supporting schools and collaborating with each other. It is crucial to engage this middle tier when reforming a school system, as this level has high capacity to lead reforms forward (OECD, 2015[4]; Hargreaves and Shirley, 2019[5]).

Figure 3.1. Wales' three-tier model in education policy



Source: Welsh Government (2017[6]), *Education in Wales: Our National Mission*, http://gov.wales/docs/dcells/publications/170926-education-in-wales-en.pdf.

Under the new curriculum framework, teachers and school leaders are expected to become curriculum designers, which implies a number of additional tasks. These tasks require teachers to take the time to work collectively on elaborating their school's curriculum, and on rethinking the functioning of their schools accordingly. Teacher collaboration around pedagogical content, methods and tools is particularly essential in the absence of curricular prescription and with the view to provide fulfilling learning experiences. The leadership role of head teachers becomes prominent, for senior leadership is essential to help teachers get the time and the resources to collaborate (Chapman, Wright and Pascoe, 2018[7]; Cheung and Yuen, 2017[8]; Hamilton et al., 2013[9]; Simmons and MacLean, 2018[10]; Desimone, 2002[11]). Reporting on their experience testing the new curriculum, Innovation schools emphasised school leaders' ability to facilitate collaboration was essential to the implementation process (Wavehill, 2019[12]).

The principle of a curriculum designed locally also suggests that schools should engage with students, parents, local actors and other schools as they define their own school curriculum, although specific guidance on how to implement this principle has yet to be developed. In this area, the role of schools' governing boards will be crucial. Some schools in Wales already have strong relationships with their local community and with the other schools within their cluster, and some have involved students in reflections around the new curriculum (OECD visits and (Wavehill, 2019[13])). However, collaboration with these actors needs to become more systematic as the new curriculum is implemented, to guarantee some coherence locally and nationally. 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 own local context (New Zealand Ministry of Education, 2019[14]).

Key actors of the middle tier are also expected to evolve in their role in response to the new curriculum. Estyn, for one, continues to play an essential role as the Inspectorate, however the new curriculum implies a change in the shape and focus of inspections. The Inspectorate is responsible for informing the public and the

government about the quality of the education provided by schools, their contribution to students' health and well-being, as well as their performance and the quality of their management. Estyn was already revising its inspection framework in 2018-19, but further adaptations will be needed including in inspection practices, analysis and diffusion once the national curriculum framework is settled (Donaldson, 2018[15]).

Local authorities and regional school improvement partnerships ("regional consortia") also have a major role to play, including to support all schools in developing and implementing the curriculum in a manner that guarantees high quality local curricula are designed by all schools in their jurisdictions and that pupils in their jurisdictions have a high-quality curriculum experience. The 22 local authorities in Wales are responsible for direct allocations of funding to publicly funded schools and for supporting vulnerable students. The local authorities work closely with the governing bodies of education institutions, and lead the four regional consortia, established in 2012 to help streamline local school improvement services among other purposes. It was reported to the OECD that the four regional consortia undertake a range of activities in support of curriculum realisation. Some initiatives are nationally common, such as the development and delivery of the Professional Learning Programme supporting schools to realise the new curriculum or the common role of the Challenge Adviser in supporting schools. Other initiatives are regionally distinctive, such as the way regions work with their networks and clusters of schools in relation to the Schools as Learning Organisations model (SLO) or the development of critical enquiry (OECD interviews).

Higher education institutions also have a role to play in both adapting initial teacher education, advising on most appropriate professional learning offers for teachers, and generally in monitoring the developments of the new curriculum through research. Wales' universities have been involved with the reform of initial teacher education (2018) and the development of enquiry-based teaching with some practitioners. Some investigations have been carried out around the new curriculum (Newton, Power and Taylor, 2019[16]), and discussions with the Welsh Government around a national strategy for educational research have taken place. However, interviews led by the OECD team with key stakeholders pointed out that Welsh universities could contribute even more fruitfully to curriculum implementation by collaborating on a common effort to support implementation based on evidence and scholarship.

Actions by other middle-tier organisations play a determinant role in the near future of the curriculum. Qualification Wales is leading a consultation on the future of Welsh certifications including GCSEs. The shape of these qualifications and examination modalities will affect implementation of the new curriculum at secondary level (see Chapter 3).Specifically, the OECD team observed that a number of practitioners in secondary education were holding off engaging too much with the new curriculum until they had a more precise idea what the new qualifications would consist of. Qualifications Wales was conducting a multiple-year consultation on the topic at the time this report was written. Given the weight that qualifications hold in evaluation and accountability, and until they are known, there is some work to be done on reassuring all stakeholders on the fact that qualifications can hold both validity and reliability, and reflect the philosophy promoted by the new curriculum. Schools have until 2022 to get ready to implement the new curriculum from Year 7 onwards. As the new qualifications are only expected to be enacted starting in September 2025, this leaves time to discuss them further.

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. The government should be acknowledged for the energy, the resilience, and the structure it has fuelled in leading the Welsh reform journey. The involvement of the Welsh Minister for Education, of every deputy director and their team is commendable. As the curriculum moves toward national implementation, the Welsh Government needs to maintain its role as a supporting leader. This requires continuing to trust stakeholders with their responsibilities and co-constructing the process throughout implementation, while providing them with guidance and support when needed. Specifically, schools and the middle tier will need clarity and support to act coherently with each other. This also means guaranteeing that this guidance, and especially the national curriculum framework, evolves with the needs of schools as more start implementing the curriculum.

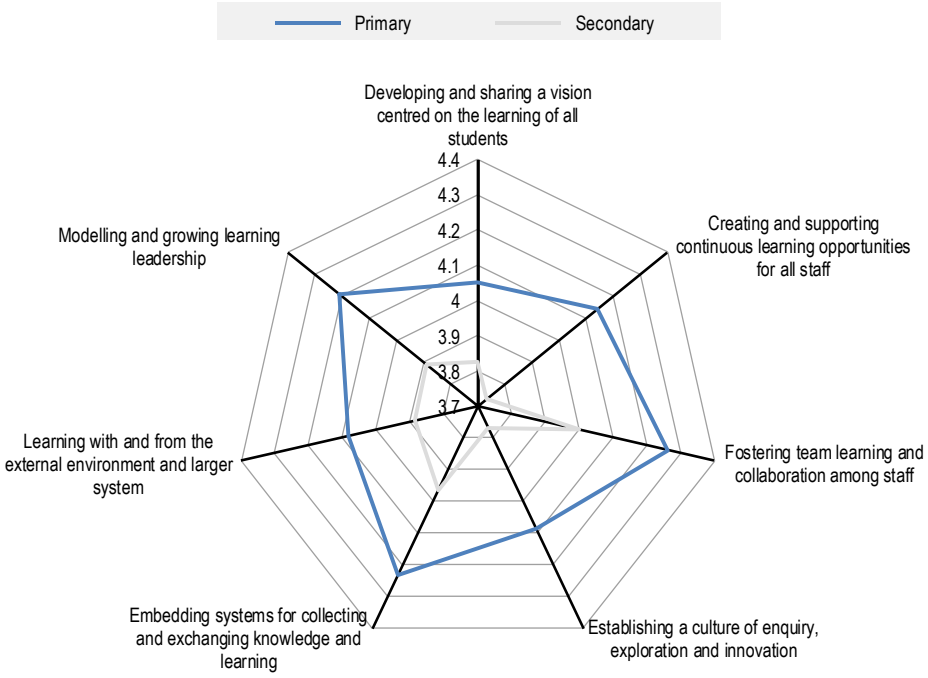
Observations and issues in co-construction

Responsibilities to facilitate collaboration

Collaboration has been a key aspect of the Welsh education reform journey (OECD, 2017[17]). Constant engagement and participation in co-construction activities, involvement of representatives of key stakeholders in working groups and monitoring boards at national level, have consolidated a systematic dialogue. Schools, school leaders and others are participating in many of these activities. The progress of the Schools as Learning Organisations model (SLO), a policy actively implemented in 2018, is also a sign of the growing culture of collaboration within and between schools, especially at primary level (Stoll and Kools, 2017[18]; Sinnema and Stoll, 2020[19]). Figure 3.2 displays all SLO dimensions, of which two give an indication of how much staff perceive they are learning as a team and collaborating with other staff, and with the external environment and wider system (OECD, 2018[20]).

Figure 3.2. Dimensions of schools as learning organisations in Wales, 2018

Average score per SLO dimension, by education level



Note: Survey data are analysed at the school level. The SLO survey items were generated in the form of a five-point Likert scale: 1) strongly disagree; 2) disagree; 3) neutral; 4) agree; and 5) strongly agree. An average school score of 4 or more across the survey items that make up one dimension was defined as the threshold for when a school is considered to have put the dimension into practice. N is 151 for primary schools and 23 for secondary schools so 15% of schools in the sample are secondary schools. This is slightly above the national share (13%).
Source: *OECD Schools as Learning Organisations* Survey, 2017.

StatLink https://dx.doi.org/10.1787/888934084418

The importance of these dimensions for curriculum implementation are highlighted in recent work by Sinnema and Stoll (2020[19]). The authors outline four interrelated challenges linked to curriculum realisation – depth, spread, reach and pace – and the associated learning demands, and emphasise the role of the SLO model in meeting those challenges and addressing the learning demands.

Just as the SLO can support curriculum implementation in schools, the model might also support curriculum leadership at the system-level. Following the introduction of the SLO policy in 2018, the Education Directorate of the Welsh Government committed to becoming a learning organisation itself, joining schools and middle-tier bodies. This decision stemmed from the recognition that the Welsh Education Directorate needed to work in new ways and to further support the efforts to establish a culture of self-improvement, continuous learning and collaboration across the education system. A joint project by the OECD's Directorate of Education and Skills and Observatory for Public Sector Innovation found that all the dimensions of the learning organisation were present in the Welsh Education Directorate, but that some work remained to be done to embed the model and strengthen its benefits. Especially, the study showed that staff in the Education Directorate were very

positive towards collaboration overall, and that at least some of them collaborated quite intensely with stakeholders outside of the Education Directorate. However, an in-depth qualitative analysis observed that this systemic collaboration was concentrated in some policy areas at the expense of others; and that the scope of collaboration was sometimes limited (Santos, Tonurist and George, forthcoming[21]).

Throughout interviews with key stakeholders in Wales, the OECD team was made aware of a number of opportunities for improvements in relation to collaboration. The first step to improve collaboration is to guarantee that the responsibility of each actor is clear to themselves and to the others, and that each honour their own role and responsibilities (Viennet and Pont, 2017[2]). Within the school tier, several issues were raised around the new roles. Across all tiers, some remain unclear about the extent to which stakeholders should be involved in designing schools' curriculum. Whereas in some schools interviewed by the OECD, both for primary and secondary education, all teachers were involved in the curriculum design exercise, other schools left it mainly for senior leadership and subject heads (in secondary schools) to decide. Some schools had discussed the topic of curriculum with schools within their cluster, and a few expressed the need for a co-ordinated curriculum at cluster level. Students contributed or were at least consulted on parts of the curriculum, but in some cases, the involvement of parents and local actors remained anecdotal (OECD interviews).

Throughout the OECD team's visits, many highlighted that the role of Pioneer and Innovation schools in the next stages of implementation remains to be clarified, as their collaboration could benefit the rest of the schools as they themselves progress with the curriculum. These schools' experience at both primary and secondary levels is rich, and most schools across Wales are located within reach of other Pioneer schools (OECD interviews). The OECD team understands the Welsh Government's position on Pioneer schools not being promoted as model schools, but there is much other schools can learn from them. Experience with similar curricula in British Columbia (Canada) or New Zealand, for instance, shows that compiling and sharing experience from practitioners can inspire other practitioners (New Zealand Ministry of Education, 2019[22]).

As for the middle tier, a general concern raised was the need for better co-ordination between the different initiatives adopted. The OECD-OPSI study on the Welsh Education Directorate found that the relationship between Welsh Government and key middle-tier bodies around the education reform agenda was not fully delineated (Santos, Tonurist and George, forthcoming[21]). In spite of the progress in communication between them, it would appear that in practice their actions take longer to co-ordinate. For instance, the responsibilities to provide professional learning to support the new curriculum seemed unclear. Some regional consortia consider this falls in their remit, while the Welsh Government also partnered with higher education institutions for enquiry-based teaching. The OECD team was further informed that several institutions hold events around the curriculum reform in a manner that is difficult to read from a school's perspective. Clarifying who fulfils which role would likely liberate some capacity for other actors and ensure effective co-operation. In addition, where multiple agencies and organisations are responsible for providing professional learning, it is vital that their efforts are co-ordinated and there are shared understandings about the learning the new curriculum demands.

Another key issue regarding clarification of roles is around the responsibility regarding school evaluation and improvement. There is a need for further clarifying the roles and responsibilities between the local authorities, regional consortia and Estyn, under the new framework for accountability and improvement. To inform the ongoing discussion between the middle tier agencies and the Welsh Government, the OECD team urges for caution in interpreting some of the recommendations of the Learning Inspectorate report (Donaldson, 2018[15]). These point to the option of inspectors engaging with schools more regularly, as part of a collaborative approach to self-evaluation to be developed involving trained peer reviewers, consortia staff and inspectors. Although in principle agreeing with these recommendations, there is a need to clarify what such increased

engagement of Estyn inspectors means in practice. It should be clear to schools who will provide school improvement support – currently the mandate of the regional consortia.

Stakeholders interviewed by the OECD team expressed that Estyn appeared to be engaged in a range of activities, partly due to its commitment to support the curriculum reform, including conducting training and dissemination events. Several of the people the OECD team spoke with wondered whether Estyn as an inspectorate body was best placed to undertake such activities, and noted that for Estyn to be able to engage in such collaborative ways of working, new to many of its staff, would call for a major organisational transformation. As the dialogue is ongoing between Estyn, the Welsh Government, regional consortia and local authorities, there is a need for caution about the inspectorate's capacity to expand its role and responsibilities beyond its role of independent inspector and advisor on the quality of education, and not to stretch the organisation's capacity.

This is important also considering the ambitious reform agenda that is proposed for Estyn in the Learning Inspectorate report (Donaldson, 2018[15]) which may call for prioritisation and/or defining a longer-term strategy for organisational development. For example, the proposed changes to Estyn inspections and the expansion of its research function – both important changes and arguably core functions of the organisation – will already require a considerable amount of resource to be realised.

At the same time, stakeholders warned about the risk of the review of the schools' self-evaluation and improvement plans by the improvement advisors of the regional consortia becoming a "mini-inspection". Regional consortia seemed well aware of this risk. They see their role as what one interviewee noted "a critical, but supportive friend" to schools. This combination of critical and supportive friend is central to help schools design and implement the new curriculum with success (OECD interviews).

Successful realisation of the curriculum will depend on the continuous co-ordination and collaboration between all the key stakeholders of the reform, especially within the diverse middle tier. Having clarity on each other's roles is necessary to help stakeholders move the Welsh system from one based on high-stakes accountability to one based on trust and professionalism. The Welsh Government plays a major role as a supportive leader in this regard. Trust and collaboration can only work effectively if stakeholders know their role and that of their peers, and if they trust each other to comply with their role.

Co-construction to build trust across the system

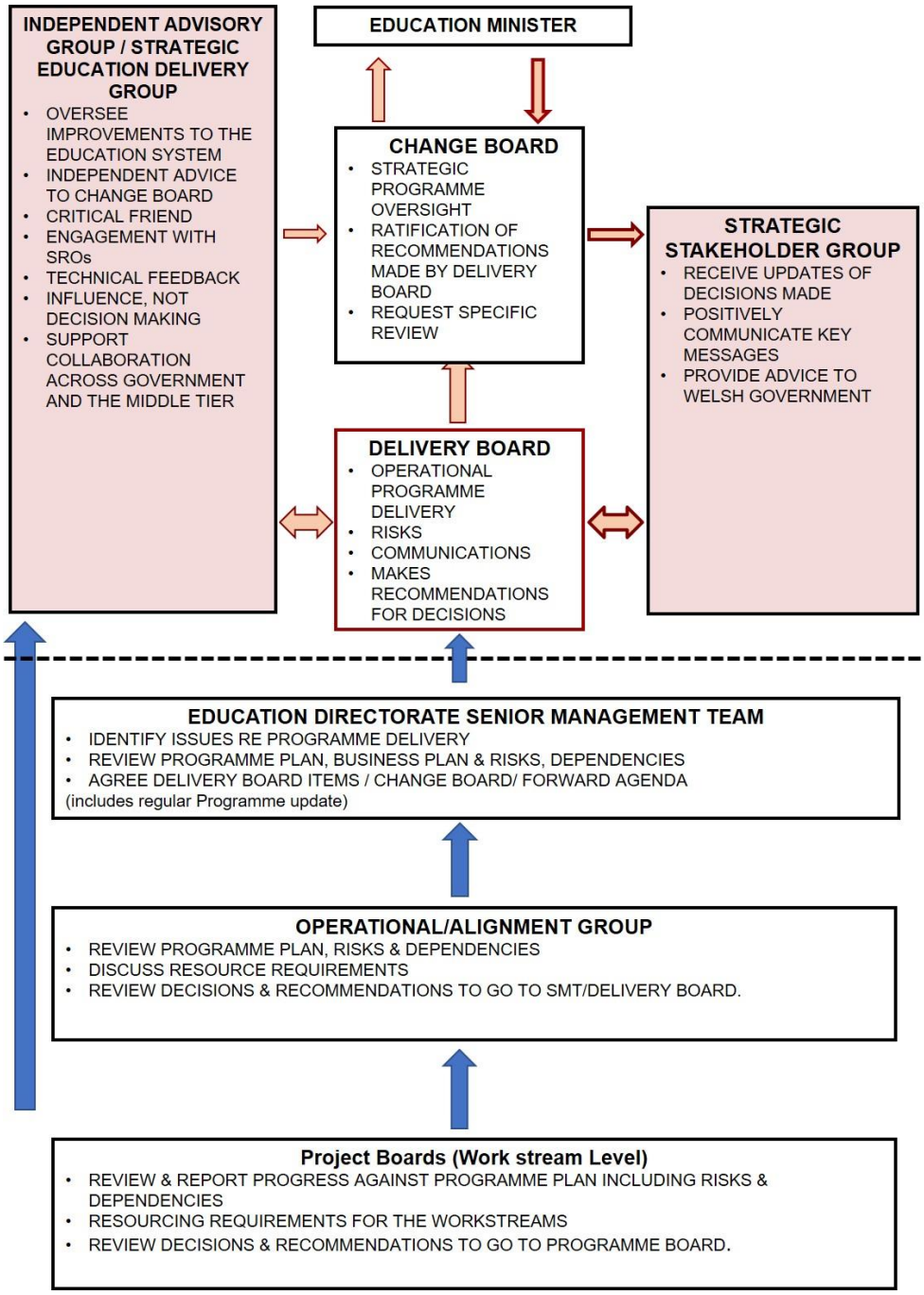
This co-construction of the curriculum in Wales reflects an international trend toward open government, an attempt to better respond to citizens' demands and to restore their trust in public institutions (OECD, 2017[23]). As traditional representative bodies have evolved and technologies have expanded possibilities to participate, more actors have entered the public debate worldwide. In addition, awareness of the importance of the quality of education for the future of societies has expanded beyond education professionals and parents to occupy both international and national policy agendas (Lessard and Carpentier, 2015[24]; OECD, 2015[25]; OECD, 2016[26]). As a result, governments cannot rely on linear forms of participation only, but have to engage with a broader range of stakeholders (Rouw et al., 2016[27]).

The curriculum reform in Wales engages stakeholders by design through co-construction and through its new approach to curriculum design. First, 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. Indeed the small size of the education system has also contributed to the success of these mechanisms.

The Pioneer Schools Network engaged over 200 schools in developing the curriculum and enabling policies, and 16 Innovation schools – the network's successors for curriculum implementation – are formally mobilised to test and enrich the curriculum framework through local design (see Box 2.1 in the previous chapter).

Working groups bring multiple stakeholders together to address policy topics in more depth and to monitor and steer their development. Examples include groups of practitioners developing the Areas of Learning and Experience for the draft framework, the Curriculum and Assessment Group mixing international and local experts, and the Strategic Education Delivery Group bringing all members of the middle tier together for co-ordination. The Welsh Government structured the reform's governance around bodies like the Delivery Board and the Change Board that include representatives of key education organisations, ensuring that all efforts are directed towards the realisation of the new curriculum and for maintaining momentum (see Figure 3.3).

Figure 3.3. The Welsh education reform's governance structure



Note: The Welsh Government regularly reviews and updates the reform's governance structure.
Source: Welsh Government (2019[28]), *Programme definition document*.

Consultations engage schools, local authorities, regional consortia and other stakeholders in discussing at breadth elements such as the vision, policy priorities and the various reform levers. Consultations and national discussions around the curriculum in Wales are an integral part of the co-construction effort, given that they either form the basis of a new policy or review elements that were co-constructed themselves. Examples include the seminal national discussion leading to the Donaldson report (2015[29]) and the 2019 feedback process organised around the draft curriculum framework.

Secondly, the principle of local design implies that schools and their community design their own school curriculum within the new national framework. This principle enshrines stakeholders' engagement throughout the policy process, acknowledging the responsibility each school holds in conceiving and realising locally relevant curricula (see Chapter 2). The OECD team met with some of the schools who have been exploring approaches to design local curricula, including regular schools and schools from the Pioneer and Innovation networks. Unanimously, these schools declared that having to design the school's curriculum mobilised teachers as well as school senior leadership, and sometimes even support staff and students.

The OECD team observed how co-construction has taken roots in education stakeholders' minds in Wales, forging a sense of pride and ownership and readying stakeholders for the curriculum reform. As emphasised by an expert of education reforms during an interview with the OECD team, the degree of stakeholders' engagement in Wales at this time of the reform process is notably high. For instance, multiple activities were organised as part of the 2019 consultation on the draft curriculum framework, in which thousands of school practitioners and middle tier representatives participated (Wavehill, 2019[13]). A survey administered by the Welsh Government on schools' readiness for change, complementing the OECD assessment, found that 63% of the respondents wanted to see curriculum change happen, and more than 59% thought the new curriculum was appropriate for their school and pupils. What's more, 95% of the respondents said they were willing to learn new skills to bring curriculum change to life (Welsh Government, 2019[30]).

The OECD team found that education stakeholders welcomed the relatively new process of policy co-construction in Wales. A number of them noted co-construction facilitates understanding and implementing the new curriculum, and to further realise Wales' ambitions for a self-improving school system. 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 (OECD, 2017[17]). Building trust between stakeholders and with the government is vital to the success of the curriculum, as Wales transitions from an education system relying on high-stakes accountability measures to one based on collaboration and trust between high-quality professionals. However, sustaining this level of trust and engagement over the long run will require leadership and continued investment in these approaches and trust, as well as clear communications, to show the value of the contributions and co-construction.

A strong communication strategy

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. A clear communication strategy is a key tool for successful policy implementation (Viennet and Pont, 2017[2]). The brand "education in Wales: our national mission" (Welsh Government, 2017[6]), the systematic use of the same terms for its intent and its policy tools, have effectively brought coherence and clarity to the development of the education reform journey, laying some strong basis for stakeholders to make this mission their own. The "national mission" intends to raise school standards, reduce the attainment gap between different groups of learners and ensure an education that is a source of national pride and public confidence. The repetition of this intent and of the policy tools at work to achieve it – such as "transformational curriculum"

and “enabling objectives” – further reinforced the clarity and the identification of the reform. The OECD team could see that all schools visited were familiar with this vocabulary, as well as with the key concepts of the curriculum.

The Education Directorate’s communication strategy used a variety of channels online, paper and live. The Welsh Minister for Education held Question & Answer sessions and was consistently present at events. So was the Education Directorate, who 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 (OECD interviews). 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 online and during events allowed for adjusting the communication strategy, clarifying some issues with the curriculum policy, and debunking some of the myths tied to it. Interviews by the OECD team of several stakeholders suggested that the efforts made in terms of communication were widely appreciated. Stakeholders also mentioned that, moving forward with implementation, a challenge for the Welsh Government and other system leaders would be to fine-tune and maintain unity in their messages to all relevant stakeholders, while offering some tailored communication for specific key actors, such as teachers, students, parents and school governors (OECD interviews).

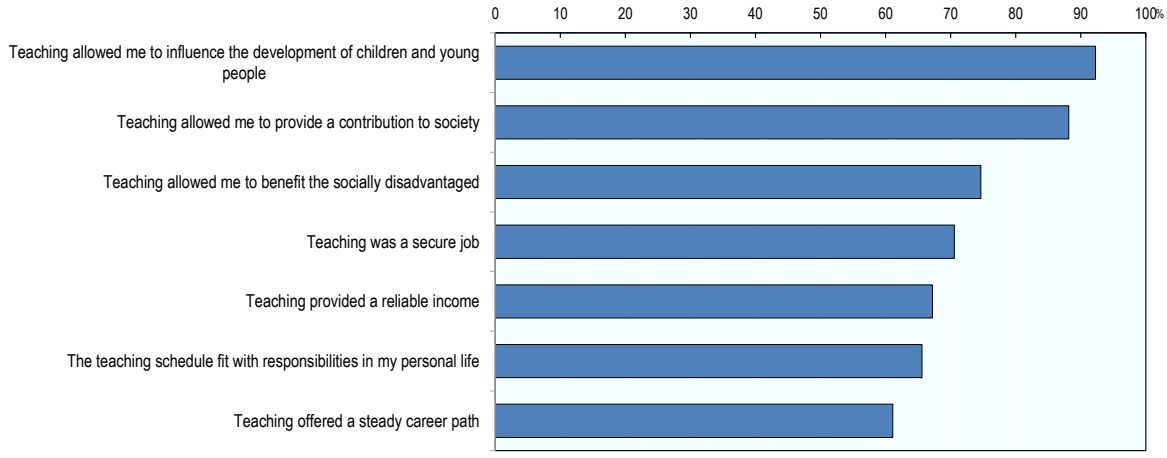
When interviewed by the OECD team, the Education Directorate’s communication team was conscious of the upcoming challenges to continue with the same clarity while providing the depth of support other actors need from the government, as the issues of implementation became more prominent. The OECD team was told repeatedly, for instance, that schools were unsure about their actions during the two-year period before compulsory implementation of the curriculum was to happen. Regional consortium representatives insisted that part of the effort in communication resided in helping school prioritise their effort and sequence their activities throughout implementation, to avoid rushing the process. Initiatives suggested were the creation of user experience methods, using milestones and staging what schools at different stages of implementation looked like, and what was needed to be ready by 2022. At both national and local levels, the concern was to keep the message clear about the next stages of implementation, and to make sure it reached all schools (OECD interviews).

Support for curriculum change across schools

Continuous engagement with education stakeholders can enable governments to learn essential information about stakeholders’ readiness to implement by gaining insights into their perceptions of the proposed policy or reform (Viennet and Pont, 2017[2]). In the case of a curriculum change such as in Wales, a powerful element is that educators are convinced, in majority, that the new curriculum will make a positive difference for their students (Wavehill, 2019[13]; Welsh Government, 2019[30]). According to teachers from across the OECD, influencing the development of children and young people was their first motivation in deciding to become a teacher (Figure 3.4).

Figure 3.4. Motivations to become a teacher, TALIS 2018

Percentage of lower secondary teachers who report that the following elements were of moderate or high importance in becoming a teacher (OECD average-31)



Note: Values are ranked in descending order of importance for the motivation for becoming a teacher.
Source: OECD (2019[31]), *TALIS 2018 Results (Volume I): Teachers and school leaders as lifelong learners*, OECD Publishing, Paris, https://doi.org/10.1787/1d0bc92a-en.

StatLink https://dx.doi.org/10.1787/888934084437

How does stakeholder commitment to the Welsh reform hold up, as schools have had or are getting ready to implement the curriculum? The reform counts on strong champions among stakeholder groups such as teachers, head teachers and middle-tier organisations. These supporters emerged from the various forms of engagement, events and working groups around the curriculum reform. It would seem that those early champions who have been involved longer with the new curriculum are strong advocates for it. They have some concerns however, regarding the draft curriculum framework, including the clarity of its language and of its provision regarding assessment (Wavehill, 2019[12]).

As well as being committed, school staff in Wales seem to be reasonably confident in their ability to implement the new curriculum. As pointed out in the literature, teachers' self-efficacy is correlated with a number of positive outcomes for students' and their own experience (OECD, 2019[31]), and can reinforce their ability to change their practices when the change aligns to their beliefs about teaching and learning (Schleicher, 2018[32]; März and Kelchtermans, 2013[33]; Roehrig, Kruse and Kern, 2007[34]). A readiness for change survey carried out by the Welsh Government in 100 schools across the country in November 2019 showed that more than 75% of the teachers, school leaders and support staff responding felt they had the capabilities needed to put curriculum change into practice. More than 80% of the respondents also stressed that the school's head teacher encouraged them to embrace curriculum change and supported them in realising it (Welsh Government, 2019[30]). The OECD team met some of these engaged practitioners, whose deep understanding of the new curriculum, teaching and leadership skills clearly set them on the path to a successful implementation.

However, not all schools are as involved, ready, nor confident in their ability to implement the change. First, even among the schools whose staff are involved in the Pioneer process, very few have tested the entire

curriculum, sometimes focusing on only one Area of Learning and Experience (of six Areas that integrate all current subjects) for the students of one Year. Implementing the curriculum in whole requires some degree of organisational readiness, understanding of the curriculum, and some teaching and collaboration skills which might not have yet been triggered in those schools, as the OECD observed during its visits. Although there is no specific study about those schools that were less involved in the process, and whether there are specific contexts that may be more conducive, there seems to be a tendency to adopt a wait-and-see attitude in many schools. Some of their concerns include the uncertainty around the evolution of GCSE and A-level qualifications, the lack of clarity over the upcoming framework for inspection and accountability regime in general, and the fact that secondary schools will need to maintain two curricula for several years from 2022 onwards (OECD interviews).

Wales has made notable progress in co-construction and in developing collaborative networks that share expertise, especially that of practitioners, and there will be much to gain from fostering this collaboration to consolidate readiness for change. A crucial initiative to support organisational readiness for change of curriculum and beyond is the SLO model, which encourages a culture of continuous learning and systematic collaboration within schools. The SLO model is part of Wales' efforts to turn its education system into a learning system (see Chapter 4 for more information on the SLO model) (OECD, 2018[20]).

Curriculum change efforts, like other reform efforts are often enacted with a focus on formal structures and processes that target individual capacity or "human capital" of teachers to improve performance (Pil and Leana, 2009[35]). While these more formal, technical, and often top-down approaches at improvement are important, the relational ties between people support or constrain the flow of expertise, knowledge, and practices related to improvement and reform efforts (Daly, 2010[36]; Coburn and Russell, 2008[37]; Penuel et al., 2009[38]) such as that involved in the Curriculum for Wales. Informal social structures in schools provide opportunities for information flow and the creation of new knowledge between individuals and organisational levels and can contribute to improve capacity and readiness for change (Ahuja, 2000[39]; Spillane and Kim, 2012[40]; Tsai and Ghoshal, 1998[41]).

In Wales, at this important juncture, it will be important not to take for granted the interactions, relationships, networks and collaborations of those across the system and over time. The interdependence of those relational ties are known to ultimately moderate, influence, and even determine the direction, speed, and depth of a planned change (Mohrman, Tenkasi and Mohrman, 2003[42]).

Conclusions

Wales' commitment to co-construction has laid a strong foundation for the new curriculum to take root and flourish. Stakeholders throughout the education system are strong advocates for co-construction as well as for the new curriculum itself. They have made considerable progress in dialoguing, collaborating and earning each other's trust. Co-constructing the curriculum policy framework is not enough, however. Challenges arise as the process unfolds and the middle tier and schools turn to local design and implementation. As stakeholders' functions evolve, there is a need to clarify their new roles and responsibilities, in order to co-ordinate better the system's effort. Wales has also pursued a clear and targeted communication strategy so far, and it will be important for the Welsh Government and regional consortia to clarify what the next stages of the reform process look like from a school's perspective, and to communicate it clearly. Efforts to support all schools in getting ready to implement the new curriculum, in mind-set, skills, capabilities and resources, will be needed to facilitate the implementation process for all schools, and to ensure alignment, shared purpose and dissemination of knowledge and good practices across the country.

Next for Wales is to clarify the different players' evolving roles and responsibilities in relation to each other. This should allow for a smoother collaboration, which will be key to make this curriculum reach its potential in schools. The Education Directorate and system leaders have a central part to play to sustain the process, helping all stakeholders build confidence and do their part to change a system while making sure their efforts are co-ordinated. In addition, actions to support readiness for change across all schools in Wales can enhance the engagement and capacity required for the implementation of the new curriculum.

This chapter has presented a detailed analysis of how different education stakeholders are involved in the process of developing the curriculum, highlighting how the communication strategy and strong co-construction process can provide a solid foundation for its implementation. For the next steps, it will be important for Wales to focus the co-construction process on refining roles, communication and change in schools. Building on the analysis developed in this chapter and others, Chapter 5 develops and weaves together a set of concrete recommendations and actions for a coherent implementation strategy to ensure the Curriculum for Wales reaches schools and classrooms.

References

Ahuja, G. (2000), "Collaboration networks, structural holes, and innovation: A longitudinal study", *Administrative Science Quarterly*, Vol. 45/3, p. 425, http://dx.doi.org/10.2307/2667105. [39]

Chapman, S., P. Wright and R. Pascoe (2018), "Arts curriculum implementation: "Adopt and adapt" as policy translation", *Arts Education Policy Review*, Vol. 119/1, pp. 12-24, http://dx.doi.org/10.1080/10632913.2016.1201031. [7]

Cheung, A. and T. Yuen (2017), "Examining the perceptions of curriculum leaders on primary school reform", *Educational Management Administration & Leadership*, Vol. 45/6, pp. 1020-1039, http://dx.doi.org/10.1177/1741143215587303. [8]

Coburn, C. and J. Russell (2008), "District Policy and Teachers' Social Networks", *Educational Evaluation and Policy Analysis*, Vol. 30/3, pp. 203-235, http://dx.doi.org/10.3102/0162373708321829. [37]

Daly, A. (ed.) (2010), *Social Network Theory and Educational Change*, Harvard Education Press, Cambridge, MA. [36]

Desimone, L. (2002), "How can comprehensive school reform models be successfully implemented?", *Review of Educational Research*, Vol. 72/3, pp. 433-479, https://doi.org/10.3102/00346543072003433. [11]

Donaldson, G. (2018), *A learning inspectorate - Independent review of Estyn*, Welsh Government, Cardiff, https://www.estyn.gov.wales/document/learning-inspectorate-independent-review-estyn. [15]

Donaldson, G. (2015), *Successful Futures: an independent review of curriculum and assessment arrangements in Wales*, Welsh Government, Cardiff, UK, https://gov.wales/sites/default/files/publications/2018-03/successful-futures.pdf (accessed on 12 December 2019). [29]

Hamilton, R. et al. (2013), "Key competencies in secondary schools: An examination of the factors associated with successful implementation.", *Teachers and Curriculum*, Vol. 13, pp. 47-55, https://eric.ed.gov/?id=EJ1122018 (accessed on 6 January 2020). [9]

Hargreaves, A. and D. Shirley (2019), "Leading from the middle: its nature, origins and importance", *Journal of Professional Capital and Community*, Vol. 5/1, pp. 92-114, http://dx.doi.org/10.1108/JPCC-06-2019-0013. [5]

Lessard, C. and A. Carpentier (2015), *Politiques educatives : la mise en oeuvre*, Presses Universitaires de France, Paris. [24]

März, V. and G. Kelchtermans (2013), "Sense-making and structure in teachers' reception of educational reform. A case study on statistics in the mathematics curriculum", *Teaching and Teacher Education*, Vol. 29/1, pp. 13-24, http://dx.doi.org/10.1016/j.tate.2012.08.004. [33]

Mohrman, S., R. Tenkasi and A. Mohrman (2003), "The role of networks in fundamental organizational change", *The Journal of Applied Behavioral Science*, Vol. 39/3, pp. 301-323, http://dx.doi.org/10.1177/0021886303258072. [42]

New Zealand Ministry of Education (2019), *Local curriculum: Designing rich opportunities and coherent pathways for all learners*, Leading local curriculum guide series, https://nzcurriculum.tki.org.nz/Strengthening-local-curriculum/Leading-local-curriculum-guide-series/Local-curriculum#high_impact_practices (accessed on 6 January 2020). [14]

New Zealand Ministry of Education (2019), *School snapshots*, Te Kete Ipurangi - Curriculum resources, https://nzcurriculum.tki.org.nz/Curriculum-resources/School-snapshots (accessed on 6 January 2020). [22]

Newton, N., S. Power and C. Taylor (2019), *Successful futures for all: exploration of curriculum reform*, Cardiff University, Cardiff, https://wiserd.ac.uk/publications/successful-futures-all-explorations-curriculum-reform. [16]

OECD (2019), *TALIS 2018 Results (Volume I): Teachers and School Leaders as Lifelong Learners*, TALIS, OECD Publishing, Paris, https://dx.doi.org/10.1787/1d0bc92a-en. [31]

OECD (2018), *Developing Schools as Learning Organisations in Wales*, Implementing Education Policies, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264307193-en. [20]

OECD (2017), *Government at a Glance 2017*, OECD Publishing, Paris, https://dx.doi.org/10.1787/gov_glance-2017-en. [23]

OECD (2017), *The Welsh Education Reform Journey: A rapid policy assessment*, OECD Publishing, Paris, http://www.oecd.org/education/The-Welsh-Education-Reform-Journey.pdf (accessed on 3 January 2020). [17]

OECD (2016), *Trends Shaping Education 2016*, OECD Publishing, Paris, https://dx.doi.org/10.1787/trends_edu-2016-en. [26]

OECD (2015), *Education Policy Outlook 2015: Making Reforms Happen*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264225442-en. [25]

OECD (2015), *Schooling Redesigned: Towards Innovative Learning Systems*, Educational Research and Innovation, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264245914-en. [4]

OECD (2014), *Improving Schools in Wales: An OECD Perspective*, OECD publishing, Paris, http://www.oecd.org/education/Improving-schools-in-Wales.pdf (accessed on 12 December 2019). [1]

Penuel, W. et al. (2009), "Analyzing Teachers' Professional Interactions in a School as Social Capital: A Social Network Approach", *Teachers College Record*, Vol. 111/1, pp. 124-163, https://eric.ed.gov/?id=EJ826000. [38]

Pil, F. and C. Leana (2009), "Applying organizational research to public school reform: The effects of teacher human and social capital on student performance", *Academy of Management Journal*, Vol. 52/6, pp. 1101-1124, http://dx.doi.org/10.5465/AMJ.2009.47084647. [35]

Roehrig, G., R. Kruse and A. Kern (2007), "Teacher and school characteristics and their influence on curriculum implementation", *Journal of Research in Science Teaching*, Vol. 44/7, pp. 883-907, http://dx.doi.org/10.1002/tea.20180. [34]

Rouw, R. et al. (2016), "United in Diversity: A Complexity Perspective on the Role of Attainment Targets in Quality Assurance in Flanders", *OECD Education Working Papers*, No. 139, OECD Publishing, Paris, https://dx.doi.org/10.1787/5jlrb8ftvqs1-en. [27]

Santos, R., P. Tonurist and B. George (forthcoming), "Towards a learning education system in Wales. Case study on the Welsh Government as a learning public organisation", *OECD Working papers on public governance*, No. forthcoming, OECD, Paris. [21]

Schleicher, A. (2018), *World Class: How to Build a 21st-Century School System*, Strong Performers and Successful Reformers in Education, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264300002-en. [32]

Simmons, J. and J. MacLean (2018), "Physical education teachers' perceptions of factors that inhibit and facilitate the enactment of curriculum change in a high-stakes exam climate", *Sport, Education and Society*, Vol. 23/2, pp. 186-202, http://dx.doi.org/10.1080/13573322.2016.1155444. [10]

Sinnema, C. and L. Stoll (2020), "Learning for and realising curriculum aspirations through schools as learning organisations", *European Journal of Education* 55, pp. 9-23, http://dx.doi.org/10.1111/ejed.12381. [19]

Spillane, J. and C. Kim (2012), "An exploratory analysis of formal school leaders' positioning in instructional advice and information networks in elementary schools", *American Journal of Education*, Vol. 119/1, pp. 73-102, http://dx.doi.org/10.1086/667755. [40]

Stoll, L. and M. Kools (2017), "The school as a learning organisation: a review revisiting and extending a timely concept", *Journal of Professional Capital and Community*, Vol. 2/1, pp. 2-17, http://dx.doi.org/10.1108/jpcc-09-2016-0022. [18]

Tsai, W. and S. Ghoshal (1998), "Social capital and value creation: the role of intrafirm networks", *Academy of Management Journal*, Vol. 41/4, pp. 464-476, https://doi.org/10.5465/257085. [41]

Viennet, R. and B. Pont (2017), "Education policy implementation: A literature review and proposed framework", *OECD Education Working Papers*, No. 162, OECD Publishing, Paris, https://dx.doi.org/10.1787/fc467a64-en. [2]

Wavehill (2019), *Curriculum for Wales 2022 Feedback Analysis*, Wavehill, Cardiff, https://gov.wales/sites/default/files/consultations/2019-10/curriculum-wales-2022-feedback-analysis.pdf (accessed on 12 December 2019). [13]

Wavehill (2019), *Innovation Schools: End-of-phase Reporting Synthesis*, Wavehill, Cardiff, https://gov.wales/sites/default/files/consultations/2019-11/innovation-schools-end-of-phase-reporting-synthesis.pdf (accessed on 12 December 2019). [12]

Welsh Government (2019), *Programme definition document*, Welsh Government (internal documents), Cardiff. [28]

Welsh Government (2019), *School staff readiness for change survey (unpublished)*, Welsh Government, Cardiff. [30]

Welsh Government (2019), *Schools' census results 2019*, Welsh Government, Cardiff, https://gov.wales/sites/default/files/statistics-and-research/2019-07/school-census-results-2019-764.pdf (accessed on 3 January 2020). [3]

Welsh Government (2017), *Education in Wales: Our national mission - Action plan 2017-21*, https://gov.wales/sites/default/files/publications/2018-03/education-in-wales-our-national-mission.pdf (accessed on 3 January 2020). [6]

4 Ensuring a conducive policy context

This chapter looks at some of the key institutional, policy and societal conditions that have and will likely continue to shape the curriculum reform efforts in Wales. Following an overview of why these are important, the chapter reviews the main contextual issues that underpin the curriculum reform, including policy coherence with particular focus on the alignment between the curriculum and the expectations of professional learning, the alignment of assessment and evaluation arrangements and the development of schools as learning organisations. The chapter then follows with an analysis of how the governance structures can continue to provide the improvement infrastructure required to support schools. It concludes with an overview of key issues for implementation.

Why is having a conducive context important?

Policies are influenced by the context in which they are developed and put into practice. Contextual features around a policy such as historical, cultural, social and economic dimensions, governance arrangements and other policies influence the process of policy development and can enable or interfere with the successful development and implementation of a given policy. For an effective policy implementation process, it is important to recognise the influence these conditions have and, where possible, build around and shape these (Viennet and Pont, 2017[1]; Fullan and Quinn, 2015[2]).

In education, the institutional structures of decision-making and implementation levels influence the way education policies may be put into practice (Fullan and Quinn, 2015[2]; Burns and Köster, 2016[3]). This refers to governance arrangements, as well as public support and engagement with the policy and with the education system as a whole. In Wales, much depends on the institutional infrastructure to support schools and other parts of the system in need to help realise the needed changes and innovations in educational practice.

At the same time, the number and variety of policies around a specific reform can make implementation complex and challenging. Research evidence shows the risks of policies contradicting or misaligning with each other, as they may be pulling schools and educational professionals in different directions. It may also be that there are many reforms at the same time, overburdening schools with too many actions (Viennet and Pont, 2017[1]; Porter, 1994[4]; Schleicher, 2018[5]). In terms of curriculum reform, it is key to align the rest of the policies around it. These might include aligning professional development for teachers to the content and aspirations of the changes in the curriculum, adapting the assessment and evaluation framework to the learning outcomes expected from the changes in the curriculum.

In Wales, as noted in earlier OECD assessments (2017[6]; 2018[7]), considerable progress has been made in recent years in ensuring coherence in its education reform agenda. Guided by Wales' education strategic plan *Education in Wales: Our national mission* (Welsh Government, 2017[8]), policies and programmes have been deliberately directed towards the realisation of the new curriculum in recent years by establishing the curriculum reform and its four enabling objectives.

This contextual coherence around the Welsh education reform agenda remains vital for the next steps in the realisation of the reform in schools. Wales has made efforts towards this, optimising the governance and school improvement structures that help shape the curriculum reform, and aiming for policy coherence. Particular focus has been placed in the alignment between the curriculum and key complementary policies such as teacher, leadership and evaluation policies and especially on preparing schools by investing in the Schools as Learning Organisations model (SLO). How these are implemented in practice for schools and aligned to the Curriculum for Wales will be at the heart of success.

An overview of contextual features

A curriculum reform does not simply rely on the curriculum itself. In Wales, two institutional mechanisms are particularly relevant to the success of the implementation of the new curriculum: the school improvement infrastructure and the model of schools as learning organisations (OECD, 2018[7]).

The curriculum reform also depends on policy measures that are essential to allow the Welsh community to turn the curriculum framework into a learning experience for students. Wales put the new curriculum at the centre of its reform agenda, developing at the same time the "four enabling objectives":

- high-quality education profession
- inspirational leaders
- assessment, evaluation and accountability
- excellence, equity and well-being.

These four complementary policies aim to develop an education system that supports and enables the implementation of the curriculum and the four purposes. This chapter analyses how the governance and the policies which are complementary to the curriculum can risk or enable the realisation of the Curriculum for Wales. It covers three of the four enabling policies that support the curriculum: leadership, teacher quality and assessment. The excellence, equity and well-being enabling objective is analysed as part of Chapter 2, considering that equity, excellence and well-being are a key aspect of student learning and need to be seen as part of the curriculum.

Observations and issues on the policy context

Optimising the institutional structure to realise the curriculum reform

Continue strengthening the school improvement service infrastructure

Although the overall responsibility for the school system lies in the hands of the Education Directorate of the Welsh Government, 22 local authorities in Wales are responsible for direct allocation of funding to publicly funded schools and for supporting vulnerable students. Local authorities have significant responsibility for public service delivery in Wales. The 22 local authorities are politically accountable through elections held every four years. They have locally elected councils that are responsible for a range of services such as trading standards, education, housing, leisure and social services.

Local authorities work closely with the governing bodies of education institutions and with the four regional school improvement partnerships, otherwise known as the four regional consortia. Wales developed its school improvement infrastructure in recent years, establishing four regional consortia to streamline and support school improvement services, following the development of the National Model for Regional Working (Welsh Government, 2015[9]). The Welsh Local Government legislation further provides structures to support joint working between local authorities on different topics including education. The regional consortia profiles vary (Table 4.1), and so do their operating model, which is based on their agreement with the local authorities they work with.

Table 4.1. Profiles of the four regional consortia in Wales, 2016

Regional profile indicators	GwE, North Wales	ERW, South West and Mid Wales	EAS, South East Wales	CSC, Central South Wales
Percentage of students in Wales	22	28	19	31
Number of public schools	439	513	245	398
Percentage of all public schools in Wales	28%	32%	15%	25%
Percentage of self-reported Welsh speakers aged 3+ (Welsh average 19%)	31	24	10	11
Percentage of students eligible for free school meals (Welsh average 19%)	16	17.5	20.8	20.7
Percentage of population belonging to an ethnic minority	2	4	4	7
Percentage of looked-after children in Wales	18	27	19	36

Notes: Children in care are children who are "looked after" by a local authority under the Children Act 1989 and Social Services and Well-being Act 2014. Regional consortia are often referred to by their acronyms in Wales: GwE stands for Gwasanaeth Effeithiolrwydd, ERW for Ein Rhanbarth ar Waith, EAS for Education Achievement Service, and CSC for Central South Consortium.
Source: OECD (2018[7]), *Developing schools as learning organisations in Wales*, https://doi.org/10.1787/9789264307193-en.

For the curriculum reform, regional consortia channel their efforts into making sure that all schools are equally involved with the new curriculum. This is especially challenging as the profile and degree of involvement with the reform process differs significantly from one school to the next. Regional consortia implementation strategies vary, but most often include funding schools and school clusters to host professional learning activities, monitoring their readiness for change and offering support accordingly, and overall helping schools in their consortium to clarify the next steps of implementation for the curriculum. The four consortia also collaborate in planning their support for the reform, including for curriculum-specific professional learning (OECD interviews and documents provided by regional consortia).

Several challenges and areas for further improvement have been highlighted. Realising the curriculum reform and developing schools as learning organisations are both likely to increase demand for support by schools, which may also increase the work and capacity requirements of regional consortia to respond to these demands. Some stakeholders have pointed out to the OECD team that regional consortia, to varying degrees, still emphasise their focus on challenging schools rather than providing them with support and promoting a learning culture, although they have recently started changing their operations to shift the balance. Consortia will need to continue to invest in their staff, especially their challenge advisers who are the first points of contact for schools, to enhance schools' ability to develop as learning organisations and support them in putting the new curriculum into practice.

The good functioning of Wales' school improvement service infrastructure depends on local authorities and regional consortia on the one hand, but their co-ordination with the rest of the middle tier and with the Welsh

Government is also crucial. As other policies are developed that rely on the same actors for implementation, it is likely that regional consortia and local authorities along with schools will have to manage a number of initiatives, therefore, the current functioning of the school improvement service is likely to change. The OECD team noted, for instance, that the implementation timeline for the new curriculum will overlap with that of the Additional Learning Needs (ALN) Act, to be implemented in 2021 (Welsh Government, 2018[10]). This Act, as outlined in previous OECD reports, implies significant changes in the way the education system addresses ALN, especially because it aims to include a large number of needs, and thus a larger student population. The ALN Act is, therefore, expected to have significant impacts on the way schools and education professionals organise their work, and thus they might require extensive support from school improvement services. That the two reforms be implemented close to each other in time can be an opportunity for greater coherence between the two, provided their implementation does not overload schools, and the school improvement services help them efficiently (OECD interviews).

Furthermore, while there are several examples of good collaboration between the consortia e.g. in the area of leadership development or the implementation of schools as learning organisations, there appears to be scope for deepening their collaboration and co-ordination in other areas. This will also be essential for working towards more common approaches and quality standards of school improvement services offered by each of the different consortia. Although the OECD team understands Wales' position of allowing for regional approaches, many of those the OECD team spoke to said that there is an obvious tension of allowing for too much variance in approaches and the quality of school improvement services (OECD interviews).

Promoting a sustainable learning culture – Wales' Schools as Learning Organisations model

Wales has invested in a policy for the development of schools as learning organisations, as a means for realising the new curriculum (Welsh Government, 2017[8]; Welsh Government, 2019[11]). However, evidence available suggests that a considerable proportion of schools in Wales are still far removed from functioning as learning organisations (OECD, 2018[7]) despite the potential of the SLO model to contribute to curriculum reform goals being realised (Sinnema and Stoll, 2020[12]). The Welsh Government and regional consortia are working collectively to provide further guidance to schools on how to actually develop as learning organisations. These efforts are part of an implementation plan jointly developed by the Welsh Government and regional consortia in coherence with the broader action plan for education (Welsh Government, 2017[8]). This plan is the outcome of a specifically established Schools as Learning Organisations Implementation Group that consists of representatives of the four regional consortia, Estyn and the Welsh Government and, until recently, OECD representatives as external advisors. This implementation group has served as an important means for ensuring a common approach across the consortia for supporting their schools to develop as learning organisations – with the clear objective of empowering them to put the curriculum into practice. The OECD team visited a number of schools that had engaged with the SLO model, and spoke positively about how it helps them drive their schools. These collective efforts that are geared towards the successful implementation of the new curriculum should be continued.

Furthermore, Egan et al. (2018[13]) suggests that there is scope for further aligning the professional teaching and leadership standards and Wales' SLO model, for instance, during future revisions of the standards. This is not an urgent issue, considering most of the people the OECD team spoke to mentioned these policies already facilitate the realisation of the new curriculum.

Policy coherence for successful curriculum implementation

Aligning the education profession with the ambitions of the curriculum

As noted earlier, research evidence shows that a strong curriculum when combined with teacher and school leader development can be the driver of powerful school and system improvement (Steiner, Magee and Jensen, 2018[14]). While stronger curricula make a real difference, that difference is magnified by matching it with professional learning. Attaining strong student learning as a result of a quality curriculum calls for aligning professional learning accordingly and ensuring quality delivery (Steiner, Magee and Jensen, 2019[15]). Wales has taken these lessons to heart. Since the start of the curriculum reform, Wales has revisited its view of and expectations for the education profession: this includes the development and implementation of new professional teaching and leadership standards, the SLO model and an overarching, National Approach to Professional Learning (NAPL).

Aligning professional standards

Professional standards set a clear and concise profile of what teachers are expected to know and be able to do. Countries use them as the framework to guide initial teacher education, teacher certification, teachers' ongoing professional development, teacher appraisal and career advancement, and to assess the extent to which these different elements are being effective. As done in Wales, teachers' standards (or profiles) should be developed with active involvement of the teaching profession; they should also be based on research and evidence. A fundamental pre-condition for the preparation of a profile of teacher competencies is a clear statement of objectives for student learning. Teachers' work and the knowledge and skills that they need to be effective must reflect the student learning objectives that schools are aiming to achieve. The teacher profile must thus reflect the sophistication and complexity of the knowledge and skills that teachers need to achieve student learning objectives at different stages of their career. Strong teacher standards encompass subject knowledge, pedagogical skills, the capacity to work effectively with a wide range of students and colleagues, and contributions to the school and the wider profession. Teacher profiles, furthermore, recognise teachers' capacity to continue developing and the expertise they develop on the job. The profile could express different levels of performance appropriate to beginning teachers, experienced teachers, and those with higher responsibilities (OECD, 2013[16]; OECD, 2016[17]), or it could express the inquiry-oriented standards a curriculum such as the Curriculum for Wales demands – standards that capture the complex, context-bound and active nature of teaching a future-oriented curriculum (Sinnema, Aitken and Meyer, 2017[18]).

Wales reviewed the professional standards for teachers and leaders focused on promoting practices in schools for the realisation of the new curriculum (Welsh Government, 2019[19]). The standards were developed in collaboration between experts, the education profession, and other key stakeholders as part of the Pioneer Schools Network. The new standards reflect a contemporary, research-informed understanding of what good teaching entails and align with the ambitions of the new school curriculum (Donaldson, 2015[20]).The standards start to encourage more agency on the part of teachers, and more "co-agency" on the part of school leaders and teachers, which is in line with current reflections internationally (OECD, 2019[21]).

During interviews by the OECD team, most stakeholders highlighted that standards were useful for guiding teachers' and school leaders' professional learning, and that the teaching profession in particular received them well (OECD interviews). The teaching standards, for example, highlight the importance of engaging in innovation and collaboration between practitioners within and across schools, and authentic learning and

enquiry and action research based approaches. Such methods are believed to be of great importance for putting into practice the new curriculum that is being shaped around "big ideas" (Sinnema, 2017[22]) or "what matters", as referred to in Wales. The integration of the standards into the *Professional Learning Passport* is intended to help teachers and leaders plan and record their professional learning (Education Workforce Council, 2017[23]) and is another example of the policy coherence Wales has been striving for.

Several interviewees in Wales noted, however, the need to further clarify some of the standards. Some pointed out that the standards published in 2018 were missing a number of key skills teachers will need in order to implement the new curriculum. For instance, local design of the curriculum is only mentioned once and only to describe the concept of cross-curricular teaching, which is too limited compared to the importance that curriculum design will take in teachers' daily work with the new curriculum. There is a further risk that in practice the standards could be translated into checklists of specific examples, oversimplifying teaching rather than promoting the desired professional responsibility that is considered essential for the realisation of the new curriculum (Egan et al., 2018[13]). The Welsh Government, regional consortia and other stakeholders have an important role to play in supporting their interpretation and enactment by offering further clarity and guidance on how these can be achieved. Furthermore, the standards should not be considered as fixed, but rather should evolve through time as needed. Such revisions should be used as an opportunity for ensuring further alignment with related policies, like Wales' SLO model.

A common understanding of professional learning

In its action plan, *Education in Wales: Our national mission* (Welsh Government, 2017[8]), the Welsh Government has made a commitment to establishing a national approach to professional learning, building capacity so that all teachers benefit from career-long development based on research and effective collaboration. The OECD team found that Wales is clearly moving away from a model of delivering professional learning away from the school setting, towards a more collaborative, practitioner-led experience which is embedded in classroom practice (OECD, 2018[7]). This is important: although professional learning opportunities outside the school premises, for example, formal education courses at universities can play an important role in the professional learning of staff, research evidence clearly points to the importance of ensuring professional learning opportunities are sustainable, embedded into the workplace and are primarily collaborative in nature (Timperley and Alton-Lee, 2008[24]; Fullan, Rincón-Gallardo and Hargreaves, 2015[25]; Stoll and Kools, 2017[26]).

This view of professional learning is reflected in the Welsh Government's National Approach to Professional Learning (NAPL) that was launched in 2019 to which a large amount of resources has been devoted. The OECD team agrees that it is important to define a common understanding of what professional learning entails in the Welsh context and aligned to the curriculum reform. It can inform and build coherence between the professional learning offered by regional consortia and the programmes provided by higher education institutions and other parties. This coherence will be crucial to help put the new curriculum into practice and to establish a sustainable learning culture in schools across Wales. Globally, the profession seems satisfied with this renewed emphasis on professional learning. However, the focus of the national approach should be not only on the provision approaches, but on the quality of professional learning delivered.

Several stakeholders the OECD team interviewed noted the NAPL appears to be a complex model because it responds to many different obligations for teachers, such as responding to teaching profession's expectations, preparing for the new curriculum requirements, or other objectives. The OECD team agrees that some simplification could be made to facilitate schools' understanding and navigation of the reform agenda and the alignment of the training needs and offer. It is important that schools understand what

quality professional learning implies in Wales, but with the curriculum up and coming, their priority is to have access to the relevant quality professional learning activities when they need it.

An additional but necessary element for reflection will be to assess what the new curriculum implies in terms of workload for education professionals. School-based curriculum design, intense professional collaboration and professional learning, for instance, might require education staff to spend more time in school and in preparation time, especially in the first years of implementation (OECD interviews).

A reformed initial teacher education

Wales recently reformed its initial teacher education (ITE). As of September 2019, there were new minimum entry requirements into ITE, including a GCSE Grade B in mathematics or numeracy and English or Welsh language or literature; a GCSE Grade C in science to teach in primary school; and a degree with at least 50% relevance to the subject of choice to teach in secondary schools. Four ITE partnerships were formalised with Welsh higher education institutions for the university-based route into teaching for the school year 2019/20, with two more expected for the following year. The employment-based routes were also updated to allow student teachers to study part time (Welsh Government, 2016[27]).

In recent years, many OECD countries have raised entry requirements for teacher education programmes, often focused on raising entry grades. Teaching in the 21st century is, however, a complex and challenging profession. It calls on a mix of high-level cognitive and socio-emotional skills to be used on a daily basis in practice. Therefore, reiterating the recommendation of an earlier OECD assessment (OECD, 2018[7]) and following the examples of countries like England, Finland and the Netherlands, Wales should consider promoting intake procedures and selection options that go beyond only degree requirements. In line with the teaching and leadership standards and the ambitions of the new curriculum, teacher education institutions can expand and pilot more elaborate, well rounded selection criteria and intake procedures that cover a mix of cognitive and socio-emotional skills, values, and attitudes.

Inspirational leaders

The new professional standards (Welsh Government, 2019[19]) also included new descriptors for inspirational leaders, in terms of pedagogy, collaboration, innovation, professional learning and general leadership practices. For instance, a teacher in a formal leadership position is expected to promote teaching and leadership in Wales, to exercise corporate responsibility and culture, to empower and support others. In terms of pedagogy, they are for instance supposed to ensure that school strategy and infrastructure are fit for purpose, to ensure the four purposes for learners, and to report on effectiveness (Welsh Government, 2019[19]).

Similarly to the analysis of the teacher professional standards, leadership standards were seen as going in the right direction but with the need for further refinement and clarification. The implications of the new curriculum for leadership, although not formalised, include responsibilities and skills that go beyond the current practice of educational leadership in Wales, and the standards can help make this practice clearer to build the leadership capacity of head teachers and other school leaders (OECD interviews).

The Welsh Government, encouraged by the OECD (2017[6]), has taken on the commitment to promote a new approach to educational leadership, including (but not limited to) schools' head teachers and other administrative and pedagogical leaders (such as deputy head teachers and subject head teachers in secondary schools). To this effect, the Welsh Government established the National Academy for Educational Leadership (NAEL), and entrusted it with the mission to create, promote and turn the Welsh perspective on educational leadership into reality.

In its first year of existence, the NAEL spent time analysing and learning about educational leadership from across the world and in Wales, working mainly with a network of head teachers committed to advance educational leadership in Wales (NAEL, 2018[28]). As a first endeavour, the Academy defined a set of criteria for quality courses in educational leadership and endorsed a number of such courses for the year 2018/19 onwards.

The OECD team acknowledges the progress made in creating a specific institution devoted to educational leadership, also because the focus on educational leadership was limited in previous reform efforts (OECD, 2017[6]; OECD, 2014[29]). Nevertheless, most stakeholders interviewed in Wales, including NAEL staff, agreed that the role of the Academy could be extended beyond endorsing courses to promote leadership. A key issue is that the Academy and educational leaders need to deepen their knowledge of what type of leadership is implied by the new curriculum. A first step could be to look systematically at what leadership practices Pioneer schools have deployed when testing the curriculum, what worked and what did not.

Aligning the assessment and evaluation policy framework with the curriculum

International evidence clearly points to the conclusion that a reform of any curricula should be matched with a review of assessment and evaluation arrangements to be successful (OECD, 2013[16]; Klenowski, Klenowski and Gladys, 2015[30]). Chapter 2 in this report reviews the changes under way in student assessment, as assessment for learning inherently forms part of the new curriculum. To support the realisation of the new curriculum and balance the accountability regime in education, the Welsh Government embarked on a reform of its assessment and evaluation framework, co-constructing the new arrangements with key stakeholders such as teachers and Estyn. This is one of the “enabling objectives” of the strategic education action plan, *Education in Wales: Our national mission* (Welsh Government, 2017[8]). At the time of drafting this report, the details of the new assessment and evaluation framework were still being clarified, but the philosophy was clearly announced: to ensure the new arrangements will be fit to promote learning and improvement.

Aligning qualifications with the new curriculum

An important step initiated recently is Qualifications Wales’ review of qualifications, which will be essential for aligning assessment and evaluation arrangements with the new curriculum. Qualifications Wales was also part of several working groups with the Welsh Government and other middle-tier agencies and was working with the Exam board(s), so all the actors who would be operating the new qualifications by 2025 were involved.

Prior to initiating its review of qualifications, Qualifications Wales engaged with Pioneer schools to consider options for the future. It will take time to agree on the new form of qualifications, but some emerging issues included discussions about whether qualifications such as GCSEs should reflect the holistic Areas of Learning and Experience (Areas) or remain subject-based, how to safeguard trust in Welsh qualifications while adapting to the curriculum’s different approach to learning, and how to assess, evaluate and qualify challenging competencies (OECD interviews).

Without such alignment there is a real risk that teaching and learning in for students aged 14 to 16 will be skewed towards the content of qualifications rather than helping students realise the four purposes of the new curriculum. Further communication on this development and the progress made in the review and the characteristics of the ‘new’ qualifications will be essential for the successful implementation of the new curriculum.

System-level monitoring and evaluation should promote learning at all levels of the system

During recent decades there has been a clear worldwide trend in education towards the development of effective monitoring and evaluation systems (Burns, Köster and Fuster, 2016[31]; OECD, 2013[16]). Such systems are central to informing policy planning for improvement, while serving the purpose of public accountability. On the other hand, the performance information they produce brings with it the risk of unintended consequences. Some studies have found evidence that such performance information, instead of leading to actual organisational learning, has resulted in blame avoidance behaviour, gaming of results, and naming and shaming (George et al., 2017[32]; Hood, 2013[33]; Nielsen and Baekgaard, 2015[34]; Daly, 2009[35]). As earlier OECD reviews have found, this has also been the case for Wales (OECD, 2014[36]; OECD, 2017[6]).

The Welsh Government and other stakeholders are aware of these findings. In response, and in line with recent paradigm shifts in public administration, often labelled the New Public Governance movement (Osborne, 2013[37]; Osborne, 2006[38]), the Welsh Government has aimed to develop trust in the profession and the system, promoting collaboration and networking and making assessment and evaluation primarily about learning. This does not imply a lack of accountability, but the obligation to use more reliable data on learning and to add or strengthen layers of checks and balances, including stronger professional and horizontal accountability.

Teacher assessments of student performance at the end of primary and lower secondary education were used to monitor progress of schools and the system. This double purpose increased the stakes of these assessments and challenged their reliability. Responding to the recommendations of the Successful Futures report by Graham Donaldson (2015[20]) and following the examples of education systems like the Flemish Community of Belgium, Finland and New Zealand (OECD, 2015[39]; OECD, 2018[7]), the Welsh Government is exploring using a sampling approach to provide data for evaluation and improvement of student learning and well-being. This is a positive development that may allow for such monitoring to cover the full breath of the curriculum and monitor system-wide progress across all areas of learning.

In addition, in consultation with the education profession, regional consortia, local authorities and other stakeholders, the Welsh Government decided to no longer use teacher assessments of students learning for monitoring individual schools. This decision will likely positively influence the quality of these assessments with teachers and head teachers being more willing to embrace (rather than hide) areas for improvement.

In light of the above, the Welsh Government set out to change its performance measures for system evaluation. It set out to develop a number of “quality indicators” that go beyond the mostly quantitative indicators that were used for monitoring school progress. It will be important to include longitudinal system-level monitoring of student progress and achievement in relation to the new curriculum’s purposes.

A new school evaluation framework to promote learning and improvement

School evaluation has been subject to considerable changes in recent years in Wales. For several years, two parallel systems have been in place that lack in synergies and are dominated by accountability demands. In 2014 a national school categorisation system was put into practice. Developed collectively by the regional consortia and the Welsh Government, this system identifies schools most in need of support over a three-year period, using a three-step colour coding strategy. Step 1 assesses publicly available school performance data and Step 2 the school’s own self-evaluation in respect to leadership, learning and teaching. Challenge advisors from the regional consortia examine how the school’s self-evaluation corresponds to the performance data under Step 1. This is intended to ensure the process is robust. Under

Step 3, judgements reached in the first two steps lead to an overall judgement and a corresponding categorisation of each school into one of four colours: green, yellow, amber and red. Categorisation then triggers a tailored programme of support, challenge and intervention agreed by the local authority and the regional consortia (Welsh Government, 2016[40]).

Although national school categorisation in general is considered an improvement on its predecessor (i.e. the school banding system), it is still considered by many a high-stakes exercise because the colour coding of schools is made public. Several stakeholders interviewed also criticised the calculation method based on the school performance data (Step 1), in particular the small weight given to the number of students receiving free school meals in the final judgement. This high-stakes use of student assessment data in school evaluations has allowed for "gaming" and even stigmatising professionals and schools working in the most challenging communities. As such, the system is considered by many as unfair and offering a false sense of public accountability. In addition, external school evaluations by Estyn are based on different criteria and methods than the national categorisation system (OECD, 2017[6]). Not surprisingly, the findings and recommendations from these different school evaluations regularly differ. The OECD team also learnt that the school self-evaluation report was frequently seen in the past as something that was done "for Estyn", with much time and effort spent on its development. At the time this report was reviewed, Estyn officials reported not having asked schools for self-evaluation reports since the 2019 summer period.

Various school self-evaluation and development tools have also been made available to schools in Wales. These documents developed by the Welsh Government, regional consortia and Estyn are not well aligned and fail to give a clear picture to schools of what is expected from them in terms of self-evaluation and development planning. They may also not do enough to encourage schools to develop as learning organisations and promote a culture of enquiry, experimentation and innovation which will be essential for putting the new curriculum into practice (OECD, 2018[7]).

Against this backdrop, the Welsh Government asked Estyn and OECD representatives to facilitate the work of a stakeholder group, tasked with formulating a common understanding of what good school self-evaluation and development planning entails in Wales. This developmental work was concluded in July 2019 and resulted in the development of a national school improvement resource, which was piloted in schools during the school year 2019/20. Similar to countries like Finland, Ireland and the Netherlands (OECD, 2018[7]), peer review by representatives of other schools is aimed to help schools in their reflections. It also allows for the dissemination of lessons learnt – both good and bad – and further enhances the horizontal accountability.

Many of those interviewed by the OECD team consider the national school improvement resource a positive development. Several strengths were noted, including the prominence placed on promoting schools to develop as learning organisations, and a participatory approach to self-evaluation involving all staff, students, parents, the community, and other partners that strengthens both "professional accountability" and "horizontal accountability" (Hooge, Burns and Wilkoszewski, 2012[41]). In addition, challenge/improvement advisors of regional consortia support school self-evaluation and improvement planning, which makes more concrete the transition away from high-stakes accountability towards accountability for improvement.

The new approach encourages schools to identify their strengths and priorities for improvement. Such prioritisation is essential for bringing about lasting change and improvements, rather than spending time and resources to meeting a large number of standards – all at the same time – thereby reducing effectiveness and efficiency, and often demotivating those involved when desired results are not achieved or maintained for long. Identifying and sharing good practices fits Wales' objective of a self-improving school

system (Welsh Government, 2017[8]), and will be essential for the successful realisation of the new curriculum. It will be important to maintain coherence between the new approach for school evaluation and the Curriculum for Wales. Schools may otherwise be pulled in different directions if the new curriculum is being implemented while the school evaluation processes place priority in other areas of improvement.

One issue under discussion with the new framework is whether to put aside the system of colour coding of schools, which is known to have tempered schools' confidence and even their capacity to engage in enquiry, experimentation and innovation (OECD, 2018[7]). Several options have been proposed, such as the publication of the school development plan and a summary of improvement priorities, which could be a positive development in terms of public accountability. The plan would provide a much more detailed overview of the actual strengths and areas for improvement of a school, compared to the colour coding scheme of national categorisation. To align it effectively to the reform agenda, it will be essential again to connect the school evaluation approach to the new curriculum, progress with its implementation, and student learning around it.

The successful implementation of this new approach to school evaluation can contribute to the realisation of the Curriculum for Wales if these are well aligned and contribute to schools focusing on the types of student learning brought about by the new curriculum and on their capacity and improvement processes to realise it. This depends, however, on a number of conditions. First, Estyn committed to include the themes that underpin the national school improvement resource as guiding principles in their school evaluations. In addition to the new curriculum, these can include safeguarding the quality of schools, while focusing on the rigour of schools' self-evaluation processes and development planning. Second, there is a need for further clarifying the roles and responsibilities between the local authorities, regional consortia and Estyn in terms of supporting school evaluation aligned to the realisation of the new curriculum (see Chapter 3 for more detail). Third, international evidence shows that the implementation of the school improvement resource will require a substantial, multi-year investment in developing the capacity of all those involved in self-evaluations and development planning (OECD, 2013[16]; Ehren, 2013[42]). The regional consortia have a leading role to play but, as also noted by several interviewees, to fully integrate the new approach to school self-evaluation and improvement in schools, the resource should be introduced in leadership development and teacher education programmes. This proposal fits Wales' objective of a self-improving school system (Welsh Government, 2017[8]) as it expands the school improvement role of its higher education institutions. Fourth, it is important that the Welsh Government, regional consortia and Estyn clarify and jointly communicate on the transition to the new system of school self-evaluation and Estyn evaluations aligned to the new curriculum. Discussions were ongoing between these actors at the time this report was written (OECD interviews).

The Welsh Government worked to communicate clearly about any changes to assessment, evaluation and accountability arrangements, and how they align to the curriculum. Schools, students, parents and other stakeholders will benefit from a clear, holistic presentation of the new system of assessment, evaluation and accountability that is focusing attention on learning and the new curriculum, critical reflection and transparency. Participants to an OECD-Welsh Government stakeholder event in 2018 made the insightful suggestion to develop and disseminate a simple narrative and supporting graphical presentation of the 'new/emerging' assessment, evaluation and accountability arrangements, compared to the 'old' arrangements. At the time of writing, the OECD team had access to a draft version of such document. The OECD team agrees that such a communication piece, which highlights the co-construction process, and explains the new system aligned to the new curriculum as it begins the next stages of implementation, may have great value.

A new education research strategy

In addition, a prominent issue that has been raised during several of the interviews with the OECD team was the need for a strategic research agenda that is used to strengthen the quality of curriculum design, teaching and learning across schools in Wales, and can also contribute to monitor progress in the realisation of the curriculum. It was apparent to the OECD team that compared to several years ago the Welsh Government, regional consortia, schools and other stakeholders are much more engaged with research to investigate and enhance their practice. One university study was already conducted around the implications of the new curriculum for equity, and offered promising suggestions for a research agenda around these topics (Newton, Power and Taylor, 2019[43]).

At the same time it was apparent to the OECD team that there is scope for more strategic use of research to support the curriculum reform. The Welsh Government and other stakeholders have recognised this issue and are drafting a national strategy for educational research (OECD interviews). This research agenda should form an integrated part of the overarching assessment, evaluation and accountability framework. Although in its early days, the National Strategy for Educational Research and Enquiry (NSERE) sets out the ambition that Wales will develop critical enquiry as part of both the professional learning offer and school-level curriculum making. The NSERE aims to create the environment within which the middle tier can work with schools to develop their skills in enquiry, on the one hand, and enrich the evidence base for all schools to draw from, on the other (OECD interviews). It would also be advisable in the future, to involve higher and post-secondary education institutions around the analysis on the possible impact of the new curriculum on their students and their own teaching practices, once the first cohorts to experience the Curriculum for Wales reach those levels of education.

Overall, Wales is moving towards a stronger system of assessment, evaluation and accountability focused on learning, critical reflection, transparency and trust. The OECD team shares the views expressed during interviews and stakeholder events that the new system Wales is moving towards is not decreasing accountability measures but is shifting the approach towards a professionally driven system. The effort aims to strengthen and better align several evaluation arrangements with adding layers of checks and balances (i.e. professional accountability) through a more systematic participatory approach to school self-evaluation and peer review.

The OECD team considers that there is scope for better aligning the policies and the whole system to the objectives and aspirations of the new curriculum and its realisation in schools. To develop it, the strong processes of co-construction practised in Wales could be a valuable approach to ensure they are fit for purpose and there is strong engagement. This has already been done to develop the school self-evaluation resource through 2018, with Estyn, OECD and practitioner working groups.

Conclusions

There is a shift in Wales from what had become a managerial education system to one based on trust and professionalism, which can build on a favourable political and policy environment: most parties and governance processes are aligning behind the curriculum, and many key policies complementary to the Curriculum for Wales are evolving in the same direction. This is because efforts were made to make the education reform journey a coherent one, with the four enabling objectives around the curriculum, including the teaching profession, leadership, assessment and equity, excellence and well-being.

Wales has invested in the quality of education professionals with the development of professional standards for teachers and school leaders, the creation of a national professional learning programme, investments in initial teacher education, and the creation of a National Academy for Educational Leadership. The Welsh Government has also focused on changing its assessment and evaluation approaches to fit the new curriculum, moving from a high-stakes school environment to one based on professionalism. Efforts have been made to develop a self-evaluation resource for schools and to enhance system-level monitoring. In addition, the school improvement infrastructure has been consolidated, with regional consortia providing school improvement services and supporting their schools to develop as learning organisations.

For the curriculum to be effective across all schools in Wales, the Education Directorate should pursue further coherence of these complementary policies with the curriculum. It can prioritise its own actions based on what the system needs, and more specifically, on what schools need to successfully roll out the new curriculum by 2022. It is essential that the accountability framework and the school-leaving qualifications align with the new curriculum principles in order to avert the risk that misaligned accountability and assessment measures undermine the curriculum.

This chapter has presented a detailed analysis of the challenges, policies and contextual elements that can contribute to success with the implementation of the Curriculum for Wales. It will be important for Wales to shift its considerations and implementation approach towards consolidating curriculum coherence around schools. Building on the analysis developed in this chapter and the previous one, Chapter 5 develops and weaves together a set of concrete recommendations and actions for a coherent implementation strategy to ensure the Curriculum for Wales reaches schools and classrooms.

References

Burns, T. and F. Köster (eds.) (2016), *Governing Education in a Complex World*, Educational Research and Innovation, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264255364-en. [3]

Burns, T., F. Köster and M. Fuster (2016), *Education Governance in Action: Lessons from Case Studies*, Educational Research and Innovation, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264262829-en. [31]

Daly, A. (2009), "Rigid response in an age of accountability: The potential of leadership and trust", *Educational Administration Quarterly*, Vol. 45/2, pp. 168-216, https://doi.org/10.1177%2F0013161X08330499. [35]

Donaldson, G. (2015), *Successful Futures: Independent Review of Curriculum and Assessment Arrangements in Wales*, Welsh Government, https://gov.wales/sites/default/files/publications/2018-03/successful-futures.pdf. [20]

Education Workforce Council (2017), *National Education Workforce Survey - Research report April 2017*, Education Workforce Council, Cardiff, https://www.ewc.wales/site/index.php/en/documents/research-and-statistics/625-national-education-workforce-survey-april-2017.html. [23]

Egan, D. et al. (2018), *Research to support the National Professional Learning Approach for Wales - Area 9 - Schools as learning organisations and the Welsh Government professional standards*, Welsh Government, Cardiff, https://repository.cardiffmet.ac.uk/bitstream/handle/10369/10438/Report.pdf?sequence=1&isAllowed=y (accessed on 6 January 2020). [13]

Ehren, M. (2013), "Impact of school inspections on improvement of schools—describing assumptions on causal mechanisms in six European countries", *Educational Assessment, Evaluation and Accountability*, Vol. 25/1, pp. 3-43, http://dx.doi.org/10.1007/s11092-012-9156-4. [42]

Fullan, M. and J. Quinn (2015), *Coherence: The Right Drivers in Action for Schools, Districts, and Systems*, Corwin Press. [2]

Fullan, M., S. Rincón-Gallardo and A. Hargreaves (2015), "El capital profesional como modelo de responsabilidad educativa", *Education Policy Analysis Archives*, Vol. 23, http://dx.doi.org/10.14507/epaa.v23.1998. [25]

George, B. et al. (2017), "Rational planning and politicians' preferences for spending and reform: Replication and extension of a survey experiment", *Public Management Review*, Vol. 19/9, pp. 1251-1271, https://doi.org/10.1080/14719037.2016.1210905. [32]

Hood, C. (2013), *The Blame Game: Spin, Bureaucracy, and Self-Preservation in Government*, Princeton University Press. [33]

Hooge, E., T. Burns and H. Wilkoszewski (2012), *Looking Beyond the Numbers: Stakeholders and Multiple School Accountability*, OECD Publishing, https://doi.org/10.1787/5k91dl7ct6q6-en. [41]

Klenowski, V., C. Klenowski and M. Gladys (2015), "Curriculum reform in testing and accountability contexts", in Wyse, D., L. Hayward and J. Pandya (eds.), *SAGE Handbook of Curriculum, Pedagogy and Assessment*, Sage Publications Ltd, Los Angeles, https://eprints.qut.edu.au/87820/. [30]

NAEL (2018), *National Academy for Educational Leadership*, https://nael.cymru/ (accessed on 6 January 2020). [28]

Newton, N., S. Power and C. Taylor (2019), *Successful futures for all: exploration of curriculum reform*, Cardiff University, Cardiff, https://wiserd.ac.uk/publications/successful-futures-all-explorations-curriculum-reform. [43]

Nielsen, P. and M. Baekgaard (2015), "Performance information, blame avoidance, and politicians' attitudes to spending and reform: Evidence from an experiment", *Journal of Public Administration Research and Theory*, Vol. 25/2, pp. 545-569, https://doi.org/10.1093/jopart/mut051. [34]

OECD (2019), *OECD Future of Education and Skills 2030 Conceptual learning framework*, OECD Publishing, Paris, http://www.oecd.org/education/2030-project/teaching-and-learning/learning/all-concept-notes/. [21]

OECD (2018), *Developing Schools as Learning Organisations in Wales*, Implementing Education Policies, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264307193-en. [7]

OECD (2017), *The Welsh Education Reform Journey - A rapid policy assessment*, OECD Publishing, Paris, http://www.oecd.org/education/The-Welsh-Education-Reform-Journey.pdf (accessed on 3 January 2020). [6]

OECD (2016), *Supporting Teacher Professionalism: Insights from TALIS 2013*, TALIS, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264248601-en. [17]

OECD (2015), *Skills for Social Progress: The Power of Social and Emotional Skills*, OECD Skills Studies, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264226159-en. [39]

OECD (2014), *Improving Schools in Sweden: An OECD Perspective*, OECD, Paris, http://www.oecd.org/edu/school/Improving-Schools-in-Sweden.pdf. [36]

OECD (2014), *Improving Schools in Wales: An OECD Perspective*, OECD Publishing, http://www.oecd.org/education/Improving-schools-in-Wales.pdf. [29]

OECD (2013), *Synergies for Better Learning: An International Perspective on Evaluation and Assessment*, OECD Reviews of Evaluation and Assessment in Education, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264190658-en. [16]

Osborne, S. (ed.) (2013), *The New Public Governance?: Emerging Perspectives on the Theory and Practice of Public Governance*, Routledge, London. [37]

Osborne, S. (2006), "The New Public Governance?", *Public Management Review*, Vol. 8/3, pp. 377-386, https://doi.org/10.1080/14719030600853022. [38]

Porter, A. (1994), "National Standards and School Improvement in the 1990s: Issues and Promise", *American Journal of Education Educational Reform through National Standards and Assessment American Journal of Education This*, Vol. 102/4, pp. 421-449, http://www.jstor.org/stable/1085463 (accessed on 27 July 2017). [4]

Schleicher, A. (2018), *World Class: How to Build a 21st-Century School System*, OECD Publishing, Paris, https://doi.org/10.1787/9789264300002-en. [5]

Sinnema, C. (2017), *Designing a National Curriculum with Enactment in Mind: A Discussion Paper*. [22]

Sinnema, C., G. Aitken and F. Meyer (2017), "Capturing the complex, context-bound and active nature of teaching through inquiry-oriented standards for teaching", *Journal of Teacher Education*, Vol. 68/1, pp. 9-27, http://dx.doi.org/10.1177/0022487116668017. [18]

Sinnema, C. and L. Stoll (2020), "Learning for and realising curriculum aspirations through schools as learning organisations", *European Journal of Education* 55, pp. 9-23, http://dx.doi.org/10.1111/ejed.12381. [12]

Steiner, D., J. Magee and B. Jensen (2019), *High-quality curriculum and school improvement: steps for systems*, Learning First - Johns Hopkins Institute for Education Policy, https://learningfirst.com/wp-content/uploads/2019/01/Quality-curriculum-and-system-improvement.pdf (accessed on 6 January 2020). [15]

Steiner, D., J. Magee and B. Jensen (2018), *What we teach matters: How quality curriculum improves student outcomes*, Learning First - Johns Hopkins Institute for Education Policy, https://learningfirst.com/wp-content/uploads/2018/11/What-we-teach-matters-FINAL-for-publication-15-Nov.pdf (accessed on 6 January 2020). [14]

Stoll, L. and M. Kools (2017), "The school as a learning organisation: a review revisiting and extending a timely concept", *Journal of Professional Capital and Community*, Vol. 2/1, pp. 2-17, http://dx.doi.org/10.1108/jpcc-09-2016-0022. [26]

Timperley, H. and A. Alton-Lee (2008), "Reframing teacher professional learning: An alternative policy approach to strengthening valued outcomes for diverse learners", *Review of Research in Education*, Vol. 32, pp. 328-369, https://doi.org/10.3102/0091732X07308968. [24]

Viennet, R. and B. Pont (2017), "Education policy implementation: A literature review and proposed framework", *OECD Education Working Papers*, No. 162, OECD Publishing, Paris, http://dx.doi.org/10.1787/fc467a64-en. [1]

Welsh Government (2019), *Professional standards - Hwb*, Hwb - the National Digital Learning Platform, https://hwb.gov.wales/professional-development/professional-standards (accessed on 6 January 2020). [19]

Welsh Government (2019), *Schools as learning organisations - Hwb*, Hwb - the National Digital Learning Platform, https://hwb.gov.wales/professional-development/schools-as-learning-organisations/ (accessed on 6 January 2020). [11]

Welsh Government (2018), *Additional Learning Needs and Education Tribunal (Wales) Act*, https://gov.wales/additional-learning-needs-and-education-tribunal-wales-act. [10]

Welsh Government (2017), *Education in Wales: Our national mission - Action plan 2017-21*, https://gov.wales/sites/default/files/publications/2018-03/education-in-wales-our-national-mission.pdf (accessed on 3 January 2020). [8]

Welsh Government (2016), *Initial Teacher Education*, Gov.wales, https://gov.wales/initial-teacher-education-ite (accessed on 6 January 2020). [27]

Welsh Government (2016), *National School Categorisation System: Guidance document for schools, local authorities and regional consortia*, Welsh Government, Cardiff, https://dera.ioe.ac.uk/27601/2/150121-guidance-en-v3_Redacted.pdf (accessed on 6 January 2020). [40]

Welsh Government (2015), *National model for regional working: revitalising people management in schools - Guidance*, Welsh Government, Cardiff, https://gov.wales/sites/default/files/publications/2018-03/national-model-for-regional-working-revitalising-people-management-in-schools.pdf (accessed on 10 January 2020). [9]

5 Revising the implementation strategy from a school's perspective

This chapter proposes updating the implementation strategy of the Curriculum for Wales. It brings together the analysis of previous chapters in an actionable approach for Welsh education stakeholders to consider next steps. It suggests that the strategy adopts a school's focus and perspective when planning for and rolling out the curriculum across all schools by September 2022. This requires developing the curriculum and capacity for all schools to be able to shape it; clarifying and focusing the roles and responsibilities of different stakeholders involved to support schools in this process; continuing to align policies around the curriculum; communicating about the next steps of the strategy; and gathering data to monitor progress and accomplishments.

Why is it important to review the implementation strategy of the Curriculum for Wales?

An implementation strategy refers to the actions taken following a 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 but the implementation strategy needs to be action-oriented, and requires being flexible enough to be updated and adapted according to progress made and eventual issues that may arise. In the case of the new Curriculum for Wales, the document *Education in Wales: Our national mission* described the policy and introduced a detailed implementation strategy in 2017, leading up to 2021 (Welsh Government, 2017[1]). As progress has been made and 2021 is close, it is time for the implementation strategy to be updated with the next steps for the Curriculum to be fully realised in schools across Wales.

A coherent implementation strategy is central to providing clarity on the range of tasks, responsibilities and timing required to move forward and achieve success with the policy. Education policy is increasingly complex due to changes in governance, to the large number of stakeholders involved, and to the long time span that education policy takes to take root in relation to other public policy spheres. Broadly communicating the implementation strategy thus provides clarity to all those involved in the policy on several central elements: what the objectives are, what needs to be done and how different people may be engaged to achieve them, the type of data that can help understand progress towards the objectives, and the timing and scale of actions to be taken (Viennet and Pont, 2017[2]).

Wales is used to developing implementation plans in education. Already in 2014, the OECD pointed out that the Welsh Education Directorate created a unit to oversee the implementation of their previous "Improving Schools Plan" (OECD, 2014[3]). However, in this report, the OECD highlighted that with a high pace of reform, there was a lack of long-term vision or a clear implementation strategy shared by all stakeholders and recommended to develop it. In its assessment of the Welsh reform journey, the OECD noted that the Welsh approach to school improvement was shifting from piecemeal and short-term towards one guided by a longer-term vision and characterised by a process of co-construction. To support the realisation of its education objectives, it encouraged Wales to continue with its curriculum reform efforts and investments in key policy areas and to strengthen the implementation process (OECD, 2017[4]).

The OECD highlighted that for the next steps, there was a risk of the piecemeal approach emerging again, and of the reform journey not reaching its objectives if additional reforms and activities were introduced that diverted energy from their realisation. To ensure Wales' reform agenda reached the desired results, it suggested strengthening the implementation process by:

- bringing further coherence across the various reform initiatives
- continuing the process of co-constructing policies with key stakeholders
- strengthening Wales' school improvement infrastructure
- further enhancing the use of evidence and research and its link to policy
- clearly communicating about the Welsh education reform journey.

For the next steps, it was important to have an easy to understand narrative about how the different policies of the education reform journey related to one another and contributed to realising the vision of the Welsh learner. The OECD proposed for Wales to "monitor, evaluate and celebrate the achievement of key milestones to maintain enthusiasm and engagement and to pay particular attention to communicating clearly the emerging assessment and evaluation framework, as it will drive behaviour" (OECD, 2017[4]).

Wales released its policy document *Education in Wales: Our national mission* with the policies and actions to progress towards achieving its objectives (Welsh Government, 2017[1]). The document presented the main objectives and policies to accomplish them, including the Curriculum for Wales at the core of the action plan, together with the enabling objectives. Progress has been made since 2017, as reviewed in previous chapters and in the next section. In 2020, it becomes necessary to revisit the implementation strategy, to acknowledge changes made and plan the curriculum rollout for the years to come.

This chapter brings together the three dimensions of effective implementation for the Curriculum for Wales from an implementation strategy perspective: policy design, stakeholder engagement and policy context (reviewed in the previous chapters). It proposes to revamp the action plan for 2017-2021 building on progress made with next steps for the successful implementation of the new curriculum across schools in Wales. It offers a concrete set of recommendations based on the analysis and develops them from a coherent implementation perspective, with suggestions to make them actionable.

Overview of the current implementation strategy for the curriculum

In 2017, the Welsh Minister for Education launched *Education in Wales: Our national mission*. In this policy document and action plan, the implementation strategy proposes objectives, actions and timelines from 2017 to 2021. It consists of one document that includes the national vision for education, the development of the curriculum to support this vision, and the enabling policies to realise the vision. This was communicated in a clear document that presented all the information consistently across Wales (Welsh Government, 2017[1]). The document provides the vision and a coherent view of the education policies and actions, which could be followed by those involved and interested and used for transparency and accountability.

The action plan focuses on developing the new curriculum and four complementary policies (referred to as enabling objectives in Wales) to realise the new vision. The four complementary policies consist of developing a high-quality education profession; inspirational leaders working collaboratively to raise standards; strong and inclusive schools committed to excellence, equity and well-being; and robust assessment, evaluation and accountability arrangements supporting a self-improving system (Welsh Government, 2017[1]). The action plan also calls for all schools to develop into learning organisations, which can more easily adapt to change.

The document provides an overview of the reform journey, and spells out the ambitions and actions for 2021 for learners, for the teaching profession, for the school system, for the middle tier and for the Welsh Government. While referring to the different policies in place separately, it brings together the vision, actions and timelines to develop the curriculum, and the four enabling objectives, and gives all the references that had led to this action plan. This document also had a complementary shorter document with key milestones up to 2022.

Progress has been made on the current action plan since its publication in 2017, as reviewed in the present report:

The Curriculum for Wales has advanced in its development

- The vision and four purposes have become a shared language across Wales and have become drivers of many actions in policy and school practices.
- The development of the Curriculum for Wales has progressed through co-construction: with contributions from Pioneer schools and other education professionals, a draft framework has been developed, drawing concrete objectives to serve the vision. The curriculum framework and proposals

for student assessment have gone through a feedback process for further refinement. This includes changes in the way learning progression will be considered, moving towards a continuum rather than a succession of stages of learning.

- Assessment approaches that align to the new curriculum are being piloted, such as adaptive online personalised assessments. There is recognition of the need to further develop the national guidance on student assessment and the educative materials to facilitate curriculum design at school level.

The co-construction process has been successful in engaging many and developing trust

- Many education professionals have been engaged across the board in working together to shape the future education system in Wales, from teachers, experts, parents, students, school leaders to those working across the middle tier. Estyn and regional consortia have invested throughout the whole process, to reconfigure school improvement and evaluation approaches that align to the needs of the new curriculum.
- The co-construction process, led and managed by the Welsh Government, has built on three key mechanisms: the Pioneer School Network, working groups and consultations. This process is giving shape to the different components around the Curriculum for Wales, including the curriculum framework, and has allowed for piloting different approaches to assessment. It has been effective in creating an environment of trust and collaboration that promotes engagement.
- Beyond their commitment, many education professionals expressed their readiness to change for a new curriculum in a survey sent out by the Welsh government, where they also reported they felt supported to implement the curriculum.

The context and enabling policies have been set into motion for a professionally-led education system

- Wales has invested in the quality of education professionals with the development of professional standards for teachers and school leaders, the creation of a National Approach to Professional Learning, investments in initial teacher education, and the creation of a National Academy for Educational Leadership.
- Assessment and evaluation approaches are in process of shifting from a high-stakes environment to one based on professionalism and self-evaluation. A self-evaluation resource for schools is being developed, and efforts are made to review system-level monitoring and school evaluation, by Estyn and consortia.
- The school improvement infrastructure and national model of networking has been operational and consolidated, with Consortia providing school improvement services and supporting their schools to develop as learning organisations.

The implementation strategy has been managed and adaptable to progress and needs

- Communication and information on *Education in Wales: Our national mission* has been clear and continuous across the country, with strong leadership from the top and regular updates through different channels.
- The Change Board and the Strategic Education Delivery Group, in collaboration with the senior management team of the Welsh Education Directorate, have guided the action plan. These different groups meet and follow up on progress regularly.

- The action plan has been flexible to accommodate education stakeholders as well as their needs and challenges. As part of this, the Curriculum for Wales and other policies have been delayed or sequenced to ensure they are attainable, and there has been some effort to prioritise policy areas.
- The Welsh Government was reviewing the action plan following this report's preliminary findings.

Next steps for the implementation strategy: adopting a school's perspective

Wales has made considerable progress with its current implementation strategy and action plan. It has committed to shaping it with the profession through a co-construction process, which has required a high level of investment and has rendered important progress in trust, in preparing the terrain and assuring readiness for change. While they cannot be attributed directly to the latest reforms, recent progress in educational outcomes of 15-year-old students in PISA might be linked to the ongoing change in culture and intense commitment to educational improvement in Wales. Maintaining this widespread positive attitude towards educational change is central as Wales prepares for the next step of curriculum implementation.

It is important to show continuity on this reform journey while acknowledging that the next steps of implementation have to place schools and their communities at the centre. Any lack of coherence or consistency in messages and actions could result in derailing investments and efforts made up to now to get the system ready for this change. Wales will move forward in a concrete and coherent way if it can sequence the actions to take to build concrete pathways between its vision for education, the four purposes, the new curriculum framework and its enabling policies. This implies continuing to pursue Wales' reform course detailed in *Education in Wales: Our national mission* with a new emphasis: adopting a school's perspective and giving schools capacity and even more room in the next steps. This will allow maintaining engagement, coherence and consistency of the main messages, while at the same time ensuring that the curriculum is effectively realised in schools.

Taking a school's perspective implies holding the Welsh vision and its four purposes of education steady, and maintaining the objectives defined in *Education in Wales: Our national mission*, while making sure there is a shared understanding of what that vision looks like in practice. This means clarifying what the vision and objectives imply for student learning in schools, and revising the actions in the plan to focus on realisation of the curriculum in schools in 2020 and beyond. It shifts the focus to making the schools the centre of every action by asking questions such as: What does this vision mean in schools for student learning? How can the Curriculum for Wales framework and supporting resources be best designed for schools to effectively use them? How can the roles of different education professionals evolve to focus on supporting schools with the curriculum realisation? How can the enabling objectives effectively support schools and teachers to adopt the new curriculum at the heart of their profession?

The next steps of the implementation strategy should prioritise the actions based on what the system, and more specifically schools, need to roll out the new curriculum successfully starting from 2022. The next section provides suggestions on the actions to make this happen, as well as on who could take them. A school's perspective should guide all the actions that follow.

It is important to note that at the time this report was being finalised, the Welsh Government and the Strategic Education Delivery Group were preparing the next steps to facilitate implementation for schools and other practitioners. The OECD preliminary findings and the analysis and recommendations offered in the present report have served as input into these discussions. This proactive approach to policy making is important; it can facilitate planning with key stakeholders and progress. This also implies that some of the findings and recommendations made in this report are already in the process of being tackled. The OECD maintains these

recommendations to encourage Wales to continue on this path. In the spirit of co-construction, it will be important for the Welsh Government, together with key stakeholders, to reflect on these, on how to accomplish them, on who would be responsible, and on how they can be monitored. For this purpose, a table is provided at the end of this chapter for Wales to discuss and consider the concrete aspects of the implementation strategy.

Recommendation 1: Developing a shared understanding of what the vision looks like in practice

Wales has a clear vision for its education system and for its learners, which inspires the new curriculum policy through the four purposes. The vision is future-oriented and resonates with those of many countries and education systems across the OECD. The degree to which stakeholders contributed to shape it, and are now committed to the four purposes, is a considerable strength to realise the curriculum successfully. The curriculum framework documents and the communication around the new policy show significant efforts to define clear objectives to serve the vision, thus facilitating action. There is, however, significant variability of perceptions on what the four purposes and the curriculum might imply for practice.

Realising the curriculum vision requires both commitment to it, and a shared understanding of what that vision looks like in practice, on the ground, in the day-to-day practice of teachers, leaders, teaching assistants and other school stakeholders, and in the experiences of children and young people. Stakeholders often make sense of the same policy messages in quite different ways, which can significantly affect implementation. The OECD team noted that this could be the case in Wales for some key elements of the new curriculum, including the practical and pedagogical implications of the four purposes.

At this stage of the curriculum journey in Wales, it is timely to focus on creating a shared vision of what successful realisation looks like in schools. What would we see more of, and less of in schools, classrooms and other learning settings that might suggest learners are experiencing opportunities to be ambitious, capable learners; enterprising, creative contributors; ethical informed citizens; and healthy, confident individuals? If an aspiration of the curriculum is to help education move toward more professionalism, what would that look like in schools in the course of their teaching days, weeks and years? Responses to questions such as these appeared highly variable during the OECD team's visits, suggesting marked differences in how people make sense of new curriculum elements, and in particular what they consider to be practices reflective of the aspirations of the new curriculum. Reflecting collectively and finding common, concrete responses to these questions across the three tiers of Welsh education should be Wales' priority in the first six months of 2020.

The OECD team's recommendation is to develop a shared understanding of what the vision looks like in practice. This should help initiate better coherence both internal within the curriculum, and external, with the enabling policies. Shared meaning will inform initiatives to develop capabilities across the system; clarify which resources are needed where; and help define relevant indicators and targets to monitor reform progress. To this end, the following actions can be considered:

- **Action 1.1:** Develop a shared overarching vision of what the curriculum implies for practice in schools. This can be accomplished through collaboration between the Welsh Government (Education Directorate), schools, practitioners (including inspectors, etc.), representatives on the Strategic Education Delivery Group.
- **Action 1.2:** Define associated operational objectives and indicators to monitor progress towards achieving the vision, including the implementation of the curriculum. The Welsh Government (Education Directorate) and the Strategic Education Delivery Group can define these objectives and monitor them in coherence with each other, and consider indicators available.

Recommendation 2: Supporting the realisation of the curriculum across all schools in Wales

The Curriculum for Wales is developing alongside an international trend to develop curriculum frameworks building around big ideas and based on broad competencies, as opposed to curricula primarily based solely on content knowledge or on skills. A key challenge for the systems developing this type of curriculum, including for Wales, is that big ideas must be clear enough to capture all the key concepts and knowledge learners are expected to learn about, while not being too prescriptive. The new curriculum marks a significant shift for primary and especially secondary education, potentially affecting work organisation for school leaders and teaching staff, timetables and transitions across levels of education. In parallel, a new approach to learning progression and student assessment is proposed, which requires schools to take ownership of the new approach and to design new forms of assessments. Developing quality content for learning and assessment and giving sufficient guidance for practitioners without being too prescriptive will be at the heart of successful implementation of the Curriculum for Wales.

The reform gives schools and teachers the role of curriculum designers with the responsibility to develop their own approach in support of the four purposes. Research shows that curriculum models that are less prescriptive and give more decision-making freedom to schools tend to be sustainable in the long term, but international experience shows that implementing school-level and local curriculum design in a system is challenging. The Welsh Government and regional consortia have a role to play in providing high-quality professional learning, as well as educative curriculum material and guidance in support for teachers, while keeping true to the principle of local design. Moving forward, it will be crucial to take into account that the new curriculum demands new knowledge, skills and capabilities to be understood, designed and put into practice.

A key factor for the success of the new curriculum at the school level are the capacity of teachers, schools and their leaders, and the way the Welsh Government and middle-tier organisations can support them in continuously improving this capacity. Research suggests a number of competencies and practices such as collaboration for school leaders and teaching staff to master the type of curriculum that Wales has developed. Practitioners surveyed in Wales report feeling ready to implement the new curriculum, but there has been no systematic appraisal of the overall quality and specific competencies of Wales' teachers, and stakeholders suggest there is need for more time and more targeted professional learning in order for them to be ready.

It is also essential to consider what the new Curriculum for Wales entails in terms of equity. The Government expressed a strong commitment to equity in education and student well-being, but two main issues arise. First, there is a question of how and under what conditions the new curriculum reduces inequity. Without conscious monitoring and purposeful focus on equity, it is possible for flexible, child-centred curriculum models to generate slightly different curricula for more and less advantaged students. The second question looks at the possible variations in implementation from one school to the next, and how to avoid widening the gap in student outcomes between schools. In moving towards the next steps of curriculum implementation, to prevent inequalities increasing, schools in need of support and local authorities would require special focus, on top of existing policies.

The OECD team's recommendation is to support the realisation of the curriculum across all schools in Wales. This should help continue to refine and improve the quality of the curriculum design itself and of the support initiatives to strengthen schools' capacity to realise the curriculum. To this end, the following actions can be considered:

- **Action 2.1**: Organise expert groups that can review the Curriculum for Wales building on the existing framework to ensure that it is internally coherent, well-designed and that it supports depth of understanding; and to consider assessment for learning approaches that are aligned and can gauge

student progress. The Welsh Government should facilitate the initiative, enabling dialogue to continue between experts and practitioners, including via the Curriculum and Assessment Group, and in close co-ordination with Estyn and Qualifications Wales.

- **Action 2.2**: Develop knowledge, materials and space for the local and school level to be able to understand and collectively design their own curriculum reflecting the aspirations of the framework. The Welsh Government should work in close collaboration with regional consortia on this, building on the examples already developed by school practitioners.
- **Action 2.3**: Invest in the development of education professionals' capacity to be the main drivers of the curriculum in schools by enhancing their skills and competencies and promoting their collaboration. This is a prime responsibility for the Welsh Government, NAEL, regional consortia and higher education institutions to discuss. The Welsh Government should guarantee the quality and consistency of professional learning across Wales, and so should NAEL for leadership development. The primary providers, including regional consortia and higher education institutions, should be included in the strategic discussions as well to guarantee this quality and consistency.
- **Action 2.4**: Prioritise equity considerations in provision of professional learning, school improvement services and resourcing to avoid risks of inequalities increasing with curriculum realisation. The Welsh Government, in collaboration with the Strategic Education Delivery Group and regional consortia, should guarantee this prioritisation of equity by detecting underperforming schools and ensuring their support through these initiatives throughout implementation.

Recommendation 3: Focusing the co-construction process on next steps for schools

Wales should be acknowledged for its efforts to embed co-construction across the system as a principle for curriculum development and education policy making more generally. The Welsh Government has succeeded in getting a critical mass of stakeholders to support and commit to the changes, and informing curriculum development with practitioners' contributions as well as academic and policy experts. There is, however, a risk that efforts are not well co-ordinated. The OECD team observed a lack of clarity about roles and their possible evolution, and a lack of shared understanding amongst the various players. As the new curriculum is moving into a new stage, Wales will need to clarify the evolving roles and responsibilities of different stakeholders in relation to each other for the effective implementation of the new curriculum in schools.

Under the new curriculum framework, teachers and school leaders are expected to become curriculum designers, which implies a new role for them. Key actors of the middle tier, including Estyn, higher education institutions, local authorities and regional consortia, are also expected to evolve in their role in response to the new curriculum. Having clarity on each other's roles is necessary to help stakeholders move the Welsh system from one with high-stakes accountability to one based on trust and professionalism. The Welsh Government plays a major role of supportive leadership in this regard. Trust and collaboration will be key to make this curriculum reach its potential, but they can only work effectively if stakeholders know their roles and that of their peers, and if they trust each other to comply with their responsibilities. The Welsh Education Directorate and system leaders have a central part to play to sustain the process, helping all stakeholders build confidence and do their part to change a system while making sure their efforts are co-ordinated.

Wales has also invested in having a clear communication strategy that has brought coherence to the different policy components and clarity on the vision, establishing a strong basis for education professionals to make the "national mission" their own. The OECD team became aware that moving forward with implementation, a challenge for the Welsh Government and other system leaders would be to fine-tune and maintain unity in

their messages to all relevant stakeholders, while offering some tailored communication for specific key actors, such as teachers, students, parents and school governors.

At present, Wales benefits from widespread commitment to the curriculum realisation effort. However, not all stakeholders, especially not all schools, are equally involved, ready, or confident in their ability to implement the change. Wales has made notable progress in co-construction, and in developing collaborative networks that share expertise, especially that of practitioners, and there will be much to gain from fostering this collaboration to consolidate readiness for change, including through the Schools as Learning Organisations model (SLO). At this important juncture, it will be important not to take for granted the interactions, relationships, networks and collaborations of those across the system and over time. The interdependence of those relational ties are known to ultimately moderate, influence, and even determine the direction, speed, and depth of a planned change.

The OECD team's recommendation is thus to focus the co-construction process on the next steps for schools, keeping the schools' perspective at the centre to move forward:

- **Action 3.1**: Clarify and ensure a shared understanding of each stakeholder's revised roles, responsibilities and concrete next steps in the curriculum realisation. Representatives in the Strategic Education Delivery Group, in collaboration with the Welsh Government, should lead this clarification task and safeguard this clarity around roles throughout implementation.
- **Action 3.2**: Sustain the co-construction process over the medium term through system leadership and continued investment in consultation and engagement approaches that have been successful in developing shared ownership of actions and trust. The Welsh Government remains the leader at the service of the education system, and has the responsibility as such to support all other stakeholders through investing in co-construction and providing leadership when relevant.
- **Action 3.3**: Continue with the clear and targeted communication strategy, which can contribute to ensuring alignment, shared purpose and dissemination of knowledge and good practices across Wales. The Welsh Government can guarantee communication unity and clarity across the system by continuing dialogue with other system leaders, and making sure the messages are understood and convey the same meaning to all.
- **Action 3.4**: Support readiness for change across all schools in Wales by developing collaborative networks that leverage curriculum expertise and resources. Pioneer schools, curriculum and assessment experts and relevant university experts should be major contributors and exchange with other schools and practitioners through to these networks. Regional consortia and local authorities have a central responsibility to guarantee that the school improvement services are consistent across Wales and effective to support schools.

Recommendation 4: Consolidating policy coherence around schools

The shift from what had become a managerial education system to one based on trust and professionalism can build on a favourable political and policy environment in Wales. Most parties and governance processes are aligning behind the curriculum, which is crucial to its successful implementation. The school improvement infrastructure is consolidated, with local authorities and regional consortia supporting schools. Regional consortia channel their efforts into making sure that all schools are equally involved with the new curriculum. This is especially challenging as the profile and degree of involvement with the reform process differs significantly from one school to the next. Realising the reform agenda will increase demand for support by schools, which may also increase the work and capacity requirements of regional consortia to respond to these demands.

Wales has invested in a policy for the development of schools as learning organisations, as a means for realising the new curriculum. However, evidence suggests that a considerable proportion of schools in Wales are still not functioning as learning organisations, despite the potential of the SLO model to contribute to curriculum reform goals being realised. This is not an urgent issue considering most people the OECD team spoke to mentioned these policies already facilitate the realisation of the new curriculum.

Many key policies complementary to the Curriculum for Wales are also evolving in the same direction. This is because efforts were made to make the education reform journey a coherent one, with the four enabling objectives around the curriculum. However, the ambition of the education reform agenda in Wales has seen much reform work in a relatively short space of time across a wide range of policies and initiatives. While Wales has invested in defining a coherent education reform agenda with the curriculum and the four enabling objectives, inevitably, there may be lack of alignment between the various policies.

Wales has especially invested in the quality of education professionals with the development of professional standards for teachers and school leaders; the creation of a National Approach to Professional Learning; the evolution of initial teacher education; and the creation of a National Academy for Educational Leadership (NAEL). Most initiatives will need to evolve in agreement with the needs arising as the curriculum and future policies are enacted in schools. The OECD team noted the need to clarify some of the standards, for instance, which seemed to be missing a number of key skills teachers need in order to implement the new curriculum. Furthermore, the professional learning model could be simplified to facilitate schools' understanding and navigation of the reform agenda and the alignment of the training needs and offer. It is important that schools understand what quality professional learning implies in Wales, but with the curriculum up and coming, their priority is to have access to the relevant quality professional learning activities when they need it.

The Welsh government has also focused on transforming its assessment and evaluation approaches to fit the new curriculum, moving from what had become a high-stakes school environment to one based on professionalism. Estyn, Qualifications Wales, regional consortia and the Welsh Government made efforts to develop new frameworks for qualifications and for accountability, including school self-evaluation resources, and to enhance system-level monitoring. International evidence points to the necessity for some accountability framework and school-leaving qualifications to align with the new curriculum principles and approach to learning, failing which schools would leave the new curriculum aside. Without such alignment, there is a risk that teaching and learning for students aged 14 to 16 will be skewed towards the content of qualifications, and towards whichever characteristics are taken into account for school evaluations. Further communication on the development of the qualifications and the new accountability framework will be essential for the successful implementation of the new curriculum.

In addition, a prominent issue that has been raised during several of the interviews with the OECD team was the need for a strategic research agenda. The Welsh Government and other stakeholders have recognised this issue and are drafting a national strategy for educational research. It was, however, apparent to the OECD team that there is scope for more strategic use of research to support the curriculum reform in the short-term, and overall to strengthen the quality of teaching and learning across schools in Wales. Including research can also help monitor progress in the realisation of the curriculum.

Policy attention should continue to focus on the four enabling objectives to successfully realise Wales' new transformational curriculum — high-quality education professionals; inspirational leaders; assessment evaluation and accountability; and excellence, equity and well-being. To reduce unnecessary complexity for teachers and schools, it will be important to have in place a process for developing and sustaining coherence across policies/initiatives over time, especially in the way they are provided to schools.

The OECD team's final recommendation is to consolidate policy coherence around schools, to allow for keeping the priority focus on the curriculum while making use and strengthening the other policy initiatives:

- **Action 4.1**: Continue to develop the role of regional consortia by enhancing the school improvement service infrastructure, investing in professionals working in consortia across Wales, and guaranteeing alignment in implementation between the curriculum and other policies, including the Additional Learning Needs (ALN) Act.
  - Regional consortia and local authorities need to continue supporting the challenge advisers, to help establish a learning culture and a focus on collaboration to bring the new curriculum to life in schools.
  - Regional consortia and local authorities, with help from the Welsh Government, should also guarantee alignment in implementation between the curriculum and other policies, including the Additional Learning Needs (ALN) Act.
- **Action 4.2**: Set learning about the new curriculum at the core of the SLO model for the coming years. This should be a driver of regional consortia strategy, with the two policies being systematically linked in school support initiatives. The SLO working group could provide support to ensure consistency across Wales.
- **Action 4.3**: Continuously evaluate policy coherence across (potentially) complementary policies, especially in terms of professional standards and leadership.
  - There is a specific need to clarify teacher standards, which should embed individual and collective teacher agency for school curriculum making in policy and in initial and continuing professional learning. This task is primarily for the Welsh Government to conduct, following dialogue with stakeholders, especially at local and school level.
  - The second line of action is to invest in school and system leadership for curriculum design. This should be promoted by NAEL and should lead to the development, endorsement and provision of adequate training for all school and system leaders.
- **Action 4.4**: Consolidate an evaluation and assessment framework and develop a systematic and robust research agenda that align to the new curriculum. This is a task for the Welsh Government and the reform's Change Board in close collaboration with Qualifications Wales, Estyn and higher education institutions.
  - This action implies continuing to review qualifications, the current accountability approach and its transition, as well policies for system and school external and self-evaluations to ensure they are aligned to the new curriculum's expected outcomes.
  - It also requires developing a systematic and robust research agenda to monitor, evaluate and inform developments of the new curriculum.

A resource to help plan the next steps

Progress has been made with the Curriculum for Wales. For the next steps, these actions require a continued concerted effort by the Welsh Government, its Education Directorate and key education stakeholders to ensure that the investments, knowledge and energy invested up to this key point result in positive change across schools in Wales.

It will be important for the Welsh Government, together with key stakeholders, to reflect on the aforementioned actions and to develop a clear understanding of how to achieve them concretely, who will be responsible, and

how they can be monitored. Table 5.1 is provided as a resource for reflection on how to move forward to ensure the Curriculum for Wales is implemented effectively.

Table 5.1. Planning the next steps for implementing the Curriculum for Wales

Implementation actions	Concrete actions	Indicators to review progress	Who is in charge?	Resources	When?
Developing a shared understanding of what the vision looks like in practice					
Develop a shared overarching vision of what the curriculum implies for practice in schools					
Define associated operational objectives and indicators to monitor progress towards achieving the vision including the implementation of the curriculum					
Supporting the realisation of the curriculum across all schools in Wales					
Organise expert groups that can review the Curriculum for Wales building on the existing framework to ensure that it is internally coherent, well-designed and that it supports depth of understanding; and to consider assessment for learning approaches that are aligned and can gauge student progress					
Develop knowledge, materials and space for the local and school level to be able to understand and collectively design their own curriculum reflecting the aspirations of the framework					
Invest in the development of education professionals' capacity to be the main drivers of the curriculum in schools by enhancing their skills and competencies and promoting their collaboration					
Prioritise equity considerations in provision of professional learning, school improvement services and resourcing to avoid risks of inequalities increasing with curriculum realisation					
Focus the co-construction process on next steps for schools					
Clarify and ensure a shared understanding of each stakeholder's revised roles, responsibilities and concrete next steps in the curriculum realisation					
Sustain the co-construction process over the medium term through system leadership and continued investment in consultation and engagement approaches that have been successful in developing shared ownership of actions and trust					
Continue with the clear and targeted communication strategy, which can contribute to ensuring alignment, shared purpose and dissemination of knowledge and good practices					
Support readiness for change across all schools in Wales by developing collaborative networks that leverage curriculum expertise and resources, with participation from practitioners, Pioneer schools, curriculum and assessment experts, and relevant university experts					
Consolidating policy coherence around schools					
Continue to develop the role of regional consortia by enhancing the school improvement service infrastructure, investing in professionals working in consortia across Wales, and guaranteeing alignment in implementation between the curriculum and other policies, including the ALN Act					
Set learning about the new curriculum at the core of the SLO model for the coming years					
Continuously evaluate policy coherence across (potentially) complementary policies, especially in terms of professional standards and leadership					
Consolidate an evaluation and assessment framework (including qualifications, accountability, system and school evaluations) and develop a systematic and robust research agenda that align to the new curriculum					

References

OECD (2017), *The Welsh Education Reform Journey: A rapid policy assessment*, OECD Publishing, Paris, http://www.oecd.org/education/The-Welsh-Education-Reform-Journey.pdf (accessed on 3 January 2020). [4]

OECD (2014), *Improving Schools in Wales: An OECD Perspective*, OECD publishing, Paris, http://www.oecd.org/education/Improving-schools-in-Wales.pdf (accessed on 12 December 2019). [3]

Viennet, R. and B. Pont (2017), "Education policy implementation: A literature review and proposed framework", *OECD Education Working Papers*, No. 162, OECD Publishing, Paris, https://dx.doi.org/10.1787/fc467a64-en. [2]

Welsh Government (2017), *Education in Wales: Our national mission - Action plan 2017-21*, https://gov.wales/sites/default/files/publications/2018-03/education-in-wales-our-national-mission.pdf (accessed on 3 January 2020). [1]

Annex A. OECD team and authors of the report

Beatriz Pont is a senior education policy analyst at the OECD Directorate for Education and Skills, with extensive experience in education policy reform internationally. She currently leads the OECD's Implementing Education Policies Programme. She has specialised in education policy and reform more generally, and in specific areas such as equity and quality in education, school leadership, adult learning and adult skills. She has also worked with individual countries such as Greece, Japan, Mexico, Norway, Sweden, the United Kingdom (Wales) and others in their school improvement reform efforts and launched the comparative series Education Policy Outlook. Previously, Beatriz was a researcher on education and social policies in the Economic and Social Council of the Government of Spain and worked for Andersen Consulting (Accenture). She studied Political Science at Pitzer College, Claremont, California, and holds a Master's degree in international affairs from Columbia University and a PhD in Political Science from Complutense University, Madrid. She has been a research fellow at the Institute of Social Sciences (Tokyo University), at the Laboratory for Interdisciplinary Evaluation of Public Policies (LIEPP, Sciences Po, Paris) and was granted an honorary doctorate from Sheffield Hallam University.

Claire Sinnema is an Associate Professor at the Faculty of Education and Social Work, the University of Auckland. Her research focuses on educational improvement, and particularly on curriculum, networks, educational leadership, practitioner inquiry and standards. Claire's research and advisory work spans the design of education-related policies, the realisation of those policies in educational settings, and the interactions amongst educators, including those in networks, as they seek to improve teaching and learning. She has a particular interest in the concept of educational systems that learn. Claire employs mixed methods approaches integrating theory of action analysis, problem-based methodology and social network analysis, and uses a range of qualitative and quantitative methods. Claire has had extensive involvement in curriculum reform work (including in New Zealand, Wales, Norway and Croatia), including national evaluations of curriculum implementation, and has served on numerous reference and advisory groups for national education agencies in New Zealand and beyond. She was appointed in 2018 to the New Zealand Government's Ministerial Advisory Group on Curriculum, Progress and Achievement and also serves as a member of the Welsh Government's Curriculum and Assessment Group. Before pursuing her academic career, Claire was a primary school teacher and Deputy Principal. See full bio: https://unidirectory.auckland.ac.nz/profile/c-sinnema.

Romane Viennet is a policy consultant with the OECD's Implementing Education Policies Programme of the OECD Directorate for Education and Skills. She co-ordinated the 2019 OECD Assessment of Wales' curriculum reform and has previously taken part in similar OECD assessments of school education policies in Mexico, Norway and Ireland. Romane holds a Master's degree in International Affairs and a B.A. in political science and economics, both from Sciences Po Paris. As a student, she was invited to advise the French Government on their education reform priorities in 2018-19. She has worked previously as a social impact analyst in France, and as a research assistant in behavioural economics projects in Cornell University, New York. Her research interests include education policy implementation and change processes in public policy.

Annex B. Schedule of the OECD visits to Wales

The present report elaborates on over six years of interactions and visits between the OECD and Wales (between 2014 and 2020), which included visits in tens of schools across the country and repeated discussions with many more through participation in various workshops and advisory groups. As a result, findings from previous school visits especially were used to set the context in which the analysis of this report is grounded.

Table A B.1. First fact-finding visit to Wales (12-15 September 2019)

Date	Activity/Representatives
Thursday 12 September 2019	Thematic sessions on major policies from the Welsh education reform
Friday 13 September 2019	
Morning	School visits:
	• St. Julian's Primary School, Newport
	• Stanwell High School, Penarth
Afternoon	ARC Summit:
	• Formal welcome, Kirsty Williams AM, Minister for Education (Wales)
	• Andy Hargreaves: Rethinking responsibility for educational improvement: setting the scene for the summit
	• Three presentations by Iceland, Nova Scotia and Scotland on the strengths and weaknesses of their current assessment system as it applies in the classroom

Table A B.2. Second fact-finding visit to Wales (6-11 October 2019)

Date	Activity/Representatives
Monday 7 October 2019	Meetings with:
08:30-09:30	• Professor David Egan, Cardiff Metropolitan University
10:00-11:00	• Professor Graham Donaldson, expert advisor to the Welsh Government (telephone call)
11:30-12:30	• Oliver Stacey, Senior Qualifications Manager, Qualifications Wales
14:00-15:00	• Diane Hebb, Director of engagement and participation, Arts Council of Wales
15:00-16:00	• Professor John Furlong OBE, University of Oxford (telephone call)
16:00-17:00	• Kevin Palmer, Deputy Director Pedagogy, Leadership and Professional Learning, Welsh Government
17:30-18:30	• Professor Alma Harris, University of Bath
Tuesday 8 October 2019	Meetings with:
09:00-10:00	• Kirsty Williams AM, Minister for Education (Wales)
10:00-10:30	• Tom Woodward, Special Advisor to the Welsh Minister for Education
10:30-11:00	• Dewi Knight, Specialist Advisor for Education Reform
11:30-12:30	• Professor Mick Waters, expert advisor to the Welsh Government
13:30-14:30	• Huw Foster Evans, Chief Executive, National Academy for Educational Leadership Wales (NAEL)
14:30-15:30	• Leigh Hughes, CCR Employment and Skills Board
16:00-17:00	• Professor David Egan, Cardiff Metropolitan University; Gareth Evans, University of Wales Trinity Saint David; Gwilym Sion ap Gruffudd and colleagues, Bangor University
17:00-18:00	• Karen Evans, Chair of the Association of Directors of Education Wales [ADEW] (telephone call)
Wednesday 9 October 2019	
09:00-11:30	Visit to Cardiff High School including meetings with head teacher and senior leadership, teachers, parents, students

	Meetings with:
12:00-13:00	• Estyn: Meilyr Rowlands, Chief Inspector; Jassa Scott and Claire Morgan, Strategic Directors
13:30-14:30	• Ruth Thackray Curriculum for Wales Senior Lead, GwE Consortium • Ysgol Creuddyn School, GwE, by video conference, including discussions with head teacher, three teachers and two students
14:30-15:30	• Rob Williams, Policy Director, National Association of Head Teachers Cymru (NAHT)
15:30-16:30	• Hayden Llewellyn, Chief Executive, Education Workforce Council
17:00-18:00	• Deputy Directors, Welsh Education Directorate
Thursday 10 October 2019	
10:00-12:00	Visit to Jubilee School, Newport, including meetings with head teacher and senior leadership, teachers, parents, students
	Meetings with:
13:30-14:30	• Strategic Education Group: Professor Dylan E. Jones, Faculty Dean of Education and Communities, University of Wales Trinity Saint David; Elizabeth Thomas, Diocesan Director of Education Policy, the Church in Wales
15:00-16:00	• Regional Consortia Managing Directors: EAS, ERW, CSC
16:00-16:30	• Lowri Jones, Head of Strategic Communications and Marketing (Education), Welsh Government
Friday 11 October 2019	
09:00-10:00	Video conference with Ysgol Cwm Brombil Comprehensive School, ERW, including discussions with head teacher, three teachers, one parent, four students
	Meetings with:
10:00-11:00	• Llorenc O'Prey, Senior Consultant, Wavehill Social and Economic Research (telephone call)
11:00-12:00	• Preliminary findings presentation to Steve Davis, Director of Education, Welsh Government
12:00-13:00	• Professional Learning leads from EAS, ERW and CSC

Table A B.3. Additional telephone interviews

Date	Representatives
Monday 5 August 2019	• Mel Godfrey, Deputy Director, Education Business Planning and Governance and Jo Crawford, Deputy Programme Manager, Welsh Government
Tuesday 6 August 2019	• Sara James, Head of School Research, Welsh Government
Wednesday, 4 September 2019	• Claire Bennett, Deputy Director Curriculum, Welsh Government
Wednesday, 16 October 2019	• Regional consortium, Professional Learning lead person, GwE
Thursday, 17 October 2019	• Regional consortium Additional Learning Needs (ALN) Lead person, EAS
Friday 18 October 2019	• Sir Alasdair Macdonald, Government Advisor on Education
	• *Contacted with no response*: Lee Cummins, Association of Schools and College Leaders (ASCL)
Monday 3 February 2020	• Dilwyn Roberts-Young, General Secretary, and Rebecca Williams, Policy Lead, UCAC Cymru (Wales' National Union of Teachers)

Implementing Education Policies

Achieving the New Curriculum for Wales

Wales (United Kingdom) is on the path to transform the way children learn, with a new curriculum aimed to prepare its children and young people to thrive at school and beyond. The new curriculum for Wales intends to create a better learning experience for students, to engage teachers' professionalism, and to contribute to the overall improvement of Welsh education. An education policy is only as good as its implementation, however, and Wales turned to the OECD for advice on the next steps to implement the curriculum. This report analyses the progress made with the new curriculum since 2016, and offers suggestions on the actions Wales should take to ready the system for further development and implementation. The analysis looks at the four pillars of implementation — curriculum policy design, stakeholders' engagement, policy context and implementation strategy — and builds upon the literature and experiences of OECD countries to provide tailored advice to Wales. In return, the report holds value not only for Wales, but also for other education systems across the OECD looking to implement a curriculum or to enhance their implementation processes altogether.

Consult this publication on line at ***https://doi.org/10.1787/4b483953-en***.

This work is published on the OECD iLibrary, which gathers all OECD books, periodicals and statistical databases. Visit ***www.oecd-ilibrary.org*** for more information.

ISBN 978-92-64-55038-4

OECD*publishing*
www.oecd.org/publishing