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Scoping study for the evaluation of the curriculum and assessment reforms in Wales: final report

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Scoping study for the evaluation of the curriculum and assessment reforms in Wales: final report

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Views expressed in this report are those of the researcher and not necessarily those of the Welsh Government.

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Glossary

Acronym/Key word	Definition
ALN	Additional learning needs
All-through school	School for learners aged 3–16/19
Areas/AoLEs	Area of learning and experience
CfW	Curriculum for Wales
CPD	Continuous professional development
CWRE	Careers and Work Related Experiences
DWP	Department for Work and Pensions
EWC	Education Workforce Council
EOTAS	Educated otherwise than at school
HESA	Higher Education Statistics Agency
HLTA	Higher-level teaching assistant
HMCI	Her Majesty's Chief Inspector of Education and Training in Wales
INSET	In-service Education and Training Day
ITE	Initial Teacher Education
OECD	Organisation for Economic Co-operation and Development
NPEP	National Professional Enquiry Project
NQT	Newly qualified teacher
PAYE	Pay as you earn
PISA	Programme for International Student Assessment
PLP	Professional Learning Passport
PLPL	Professional learning, pedagogy and leadership
PLASC	Pupil-level Annual School Census
PRU	Pupil Referral Unit
PSTL	Professional Standards for Teaching and Leadership
REC(s)	Regional Education Consortia
RSE	Relationships and Sexuality Education
SHRN	Schools Health Research Network
SLO	Schools as Learning Organisations
SWAC	School Workforce Annual Census
TA	Teaching assistant
ToC	Theory of change

Executive summary

1. This report presents findings of a scoping study relating to the evaluation of the curriculum and assessment reforms in Wales.
2. The Curriculum for Wales (CfW) is the cornerstone of the Welsh Government's efforts to reform education in Wales and build an education system that raises educational standards and enjoys public confidence. Under the reforms each school is developing its own curriculum, supported by national guidance, which will enable learners to embody the **four purposes of the curriculum** by 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.
3. The curriculum reforms are supported by a national approach to professional learning; new evaluation and improvement arrangements; a transformation of additional learning needs support and provision; and the development of new qualifications. The Welsh Government has set out a series of guidance documents for schools on how to approach curriculum design and implementation, recognising the iterative process of curriculum development.

About the scoping study

4. The Welsh Government commissioned Arad Research, in partnership with The Open University in Wales, to conduct a scoping study relating to the evaluation of the curriculum and assessment reforms in Wales.
5. The aim of the scoping study is to articulate the theory, assumptions, evidence and readiness underpinning the curriculum and assessment reforms and to use this information to develop recommendations for a robust monitoring and evaluation programme.

Methodology

6. The scoping study methodology is set out in Section 2 of this report and included:
    - the development of a **theory of change** (ToC) for the reforms through:
        - a review of documentation relating to the CfW
        - a series of workshops and discussion groups with Welsh Government officials, stakeholders and learners
        - qualitative interviews with senior leaders and practitioners in schools and settings
    - **mapping available data** sources against the elements of the ToC to identify coverage and gaps through:
        - a review of data sources relating to each element of the ToC
        - interviews with statisticians and data managers in the Welsh Government and stakeholder organisations
    - **developing priorities for a future research and evaluation programme** to support the evaluation of the CfW through:
        - discussions with Welsh Government officials and stakeholders
        - discussion with members of the CfW expert advisory group.

Programme theory

7. The ToC articulated in Section 3 of this report illustrates the complex nature of the curriculum and assessment reforms, their system-wide reach and the potential outcomes for learners, practitioners, schools and society as a whole.
    - It represents the research team's interpretation of the programme theory at the current time. Given the extended timeframe which the ToC covers, the authors recognise that policy development and other external factors are likely to influence many of the items set out in the theory. **As such the ToC should be regularly reviewed, and used iteratively to inform evaluation activity and critical thinking about the pathways between activity and outcomes as the reforms progress.**

Data mapping

8. Section 4 of this report presents the research and evaluation questions that will explore whether the mechanisms and pathways in the ToC are happening. Having identified the data and other evidence gathering that is in place or planned, section 4 sets out whether the data will allow these questions to be answered, and where the key gaps are.

    - Analysis reveals that available data would provide insufficient evidence for research and evaluation questions set out in this report.
    - Consequently, **there is a need to design and deliver a programme of data collection, research and evaluation that produces the necessary data and insights to understand the effectiveness and outcomes of the curriculum reform process**.
    - In doing so, there is a need to draw on ongoing or planned research and data collection activity that can inform the evaluation process. This should align with work commissioned by the Welsh Government to help define a new data and information ecosystem to support improvement, accountability and transparency across the school system[1], and the Equity in Education Action Plan. It should also align with the National Strategy for Educational Research and Enquiry (NSERE), and the activities of key partners including (but not limited to): regional consortia; local authorities; diocesan authorities; Estyn; Qualifications Wales; Education Workforce Council (EWC); National Academy for Educational Leadership; examination boards and higher education institutions.

Priorities for a future programme of research and evaluation

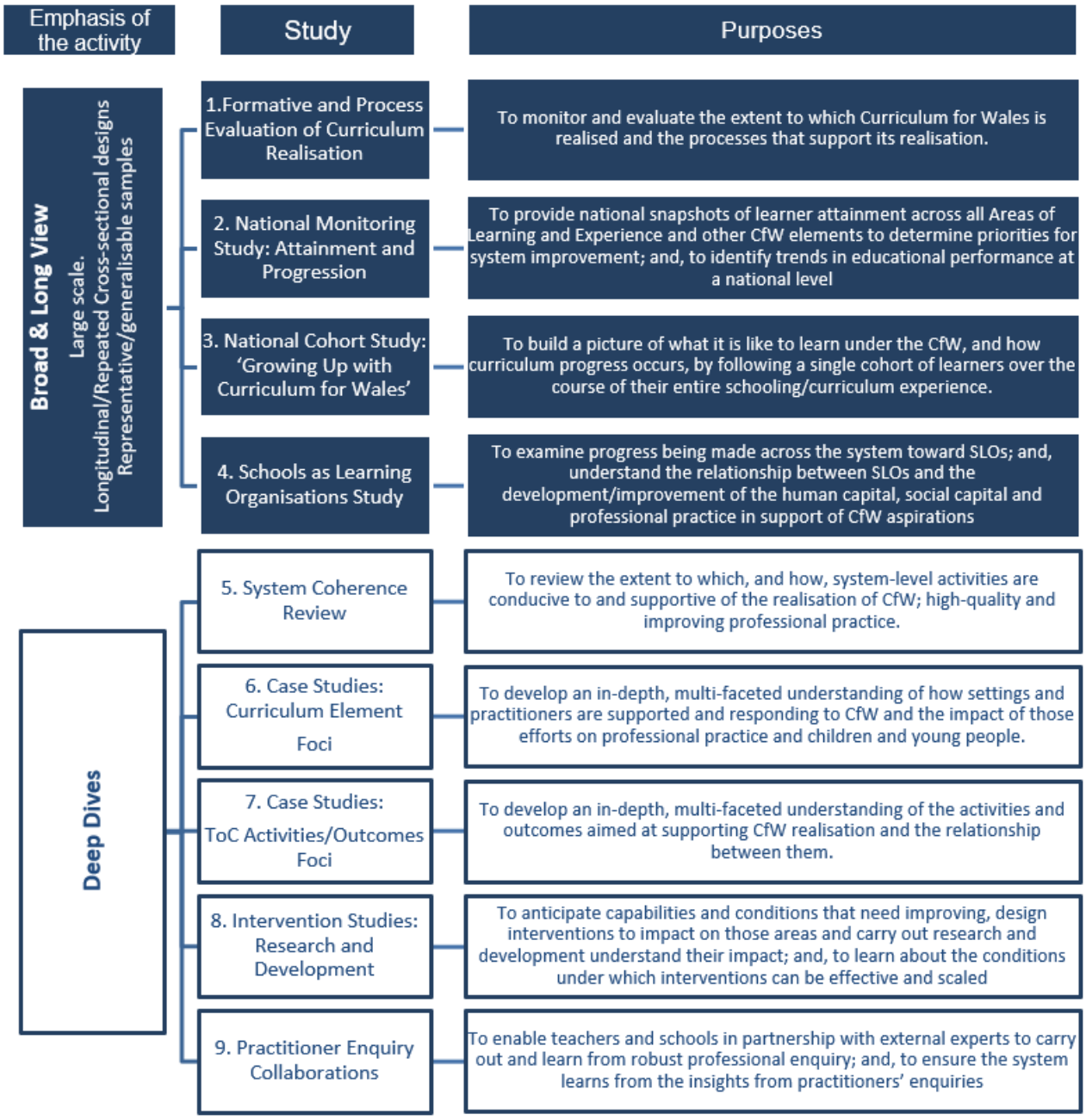
9. The authors recommend that consideration be given to a comprehensive suite of studies which, collectively, enable an examination of the progress and impact of the curriculum reforms over time. This is a large-scale programme of research and evaluation that includes studies focused on:

[1] See Research into the data and information needs and uses in the school system in Wales - Hwb (gov.wales)

- understanding **system-wide change** and the links between different aspects of the reform process
- understanding what facilitates and prevents successful implementation and impact and what should be done to ensure success
- understanding the impact of the reforms on learner progress, **standards and attainment**
- understanding progress towards **medium and longer-term outcomes for learners (including the four purposes), practitioners and parents**
- **focused / thematic studies** looking at specific aspects of the reforms.

10. Nine studies are proposed, some of which emphasise a broad and long view of research into the success of the curriculum reform, and several that recognise the importance of in-depth investigation to understand specific elements of the system at work. The studies are presented individually in Section 5 of the report. They represent a cohesive suite of evidence-gathering which offers quantitative, qualitative, mixed-methods, and short and long-term exploration. The projects include research with multiple groups that the reforms are intended to impact on. There is potential to link some studies in a range of ways. Further consideration should be given to the use of findings from larger scale studies to inform the sampling and design of others or to linking datasets where samples or sub-samples are the same in both. Such linking brings with it complexity, significant in the case of the data-linking possibility, which will need careful consideration during the design phase.
11. A summary of the proposed studies is set out in Figure 1 below.

Figure . Summary of research and evaluation programme



12. The resources required to plan, commission and deliver such a programme of data collection, research and evaluation are considerable. In light of the scale and scope of these recommended studies, it is important that consideration is given to how they relate to, and complement, other planned and emergent research activity across the wider system. This includes research and evaluation funded directly by the Welsh Government, the research activities of middle-tier partners and other external sources of research funding. There is potential for the Welsh Government to work in partnership with higher education partners, Estyn and other agencies on some of the recommended areas of research recommended.

13. The authors consider that each of the studies can offer important insights into system change and outcomes. In particular, the proposed Formative and Process Evaluation of Curriculum Realisation (Study 1) provides opportunities to understand the roles of all partners across the system in supporting implementation. In addition, the National Monitoring Study (Study 2) will be crucial in collecting data on learner attainment over time.

1. Introduction

1.1 This section provides an overview of the curriculum and assessment reforms in Wales and the purpose of the scoping study in helping to support future research and evaluation priorities.

Curriculum for Wales (CfW)

1.2 The CfW is the cornerstone of the Welsh Government's efforts to reform education in Wales and build an education system that raises educational standards and enjoys public confidence. The four purposes of the curriculum are the starting point and aspiration for every child and young person in Wales. The OECD's Improving Schools in Wales report (2014) and Professor Graham Donaldson's independent review (2015) set out a rationale for the reforms as well as recommendations for how to design a new curriculum fit for modern day Wales. Under the reforms each school is developing its own curriculum, supported by national guidance, which will enable learners to embody the four purposes of the curriculum by 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.

1.3 Under the CfW subjects will be organised around six Areas of Learning and Experience (Areas): expressive arts; health and well-being; humanities; languages, literacy and communication; mathematics and numeracy; and science and technology.

1.4 The CfW guidance promotes an integrated approach to learning and teaching. It encourages collaboration and cross-disciplinary planning and teaching to enable learners to make links between the different Areas and apply their learning to new situations and contexts.

1.5 Under the new curriculum arrangements schools support the progression of each individual learner along a continuum of learning from ages 3 to 16. The CfW

guidance describes principles of progression for the curriculum and for individual Areas, and progression steps which are supported by the statements of what matters and descriptions of learning. Linked to this, assessment should be formative, learner-focused and used to inform how practitioners respond to the needs of individuals and groups. A defining characteristic of the new approach is that curriculum, assessment and pedagogy are seen as parts of an integrated whole.

1.6 The curriculum reforms are supported by a national approach to professional learning; new evaluation and improvement arrangements; a transformation of additional learning needs support and provision; and the development of new qualifications.

1.7 The Welsh Government has set out a series of guidance documents to schools on how to approach curriculum design and implementation, recognising the iterative process of curriculum development. The most recent publication *Curriculum for Wales: the journey to curriculum roll-out* (2021) built on earlier documents and set out the phases involved in curriculum design, which were:

- **engagement** to develop a whole-school understanding of the curriculum and a vision for the teaching and learning that supports it
- **design, planning and trialling** – drawing on guidance and support
- **evaluating and preparing for first teaching**
- **first teaching**, begin to implement the curriculum, reflecting on its effectiveness over time and refining its design as learners progress.

1.8 In addition, the Welsh Government set out the principles that should underpin schools' curriculum preparation and design: development through **co-construction**; effective **pedagogy**; engagement with **professional learning** and networks; embedding the qualities of **schools as learning organisations**; considering the **wider school context**, including how the curriculum can support the ALN Code, Cymraeg 2050 and the promotion of learner health and well-being.

About the scoping study

1.9 The Welsh Government commissioned Arad Research, in partnership with The Open University in Wales, to conduct a scoping study relating to the evaluation of the curriculum and assessment reforms in Wales.

1.10 The aim of the scoping study was to articulate the theory, assumptions, evidence and readiness underpinning the curriculum and assessment reforms and to use this information to develop recommendations for a robust monitoring and evaluation programme. The study objectives were to:

- assess schools' and settings' preparations for the roll-out of the CfW, identifying key actions for supporting preparations
- develop a programme theory for the curriculum and assessment reforms, setting out key evidence and assumptions and providing a clear picture of the system and stakeholders that will implement them
- identify the evaluation questions and explore the extent to which they can be met credibly and reliably using existing, and new, data sources
- recommend a detailed monitoring and evaluation strategy for addressing the evaluation questions.

1.11 With reference to the first of the objectives listed above, a survey was carried out in June and July 2021 focused on schools' preparations for the roll-out of the CfW. An interim report, *Practitioners' preparations for the roll-out of the Curriculum for Wales* (Welsh Government, 2021m), was published in September 2021, setting out initial high-level findings. A final report was published in January 2022 presenting findings in full (Welsh Government, 2022a). Following this, interviews were carried out with 48 senior leaders and practitioners who had completed the survey on their preparations for CfW. The findings of these interviews were published in a report in June 2022, *Qualitative research with practitioners on preparations for curriculum and assessment reforms* (Welsh Government, 2022c).

1.12 This report presents findings of the other elements of the scoping study.

- Section 2 of this report presents the methodology for the scoping study.
- Section 3 focuses on the development of the programme theory.
- Section 4 presents findings relating to data mapping.
- Section 5 sets out recommendations for a future programme of research and evaluation.

Conclusions and issues for consideration are set out in Section 6.

2. Methodology

2.1 This section provides detail on the research methodology. This includes detail of the desk research, fieldwork conducted, analysis process, challenges encountered and limitations of the methodology.

Approach to developing the theory of change (ToC)

2.2 A review of documentation relating to the Curriculum for Wales (CfW) was undertaken to understand how the key activities, outcomes and anticipated impacts of the reforms had been articulated and interpreted by the Welsh Government and stakeholders. This review included:

- the Welsh Government's strategy for the education sector *Our National Mission*[2] and its more recently updated action plan[3]
- *Curriculum for Wales guidance* (Welsh Government, 2020b)
- *Curriculum for Wales implementation plan* (Welsh Government, 2021a)
- *Curriculum for Wales: the journey to curriculum roll-out* (Welsh Government, 2021b)
- *Qualified for the Future*. *Qualified for the Future: the right choice for Wales – Our decisions* (Qualifications Wales, 2021)
- *The National Strategy of Educational Research and Enquiry (NSERE): vision document* (Welsh Government, 2021f)
- *Undertaking professional enquiry: an introduction for lead enquirers* (Cardiff Metropolitan University, 2019)
- *School improvement guidance: framework for evaluation, improvement and accountability* (Welsh Government, 2021g)
- *National Network for Curriculum Implementation* (Welsh Government, 2021h)
- *What makes a school a learning organisation? A guide for policy makers, school leaders and teachers* (OECD, 2016)

[2] Welsh Government (2017a) *Education in Wales: Our national mission Action plan 2017-21*
[3] Welsh Government (2020a) *Education in Wales: Our national mission. Update October 2020.*

- *Supporting learner progression: assessment guidance* (Welsh Government, 2022b).

A full list of the documentation reviewed is included in the bibliography.

2.3 Initial workshops to discuss the development of the ToC were convened with Welsh Government officials and stakeholder organisations during May and June 2021. During these workshops, participants' views were gathered on the activities, outcomes and long-term impacts that should be included within the ToC.

2.4 The review of documentation and initial workshops led to the development of a draft ToC. During the autumn of 2021, this draft ToC was discussed in **stakeholder workshops** with Welsh Government officials and stakeholders, including Estyn, regional education consortia, Qualifications Wales and local authority directors of education.

2.5 During October and November 2021, questions relating to the anticipated outcomes of the ToC were included in **qualitative interviews with practitioners.** A total of 48 interviews were conducted with senior leaders and practitioners in 48 schools and PRUs.[4]

2.6 **Group discussions with learners** were undertaken in six schools in February 2022 (a total of 37 learners from Years 4-9 took part). These group discussions focused on gathering learners' perceptions of the anticipated outcomes of the CfW.

2.7 The findings from the **stakeholder workshops, practitioner interviews** and **group discussions with learners** were used to refine the ToC.

2.8 Once a detailed ToC was drawn up, this was used to **develop a more accessible summary version**, suitable for publication, in early 2022. The ToC is set out in Section 3.

Approach to data mapping

2.9 Following the development of a draft ToC in the autumn of 2021, an early desk review of data sources was undertaken to identify key datasets that could be mapped against the items within the ToC.

[4] These interviews were primarily focused on gathering evidence on settings' preparations for the curriculum, but included some questions on what initial outcomes practitioners might anticipate observing in the short to medium term following rollout.

2.10 Interviews with statisticians and data managers in the Welsh Government and stakeholder organisations were conducted between November 2021 and February 2022. These focused on understanding the availability of published and unpublished data sources as well as any anticipated changes to these sources that could affect the future availability of data or continuity in datasets. The interviews also explored the limitations of the data and issues for consideration in accessing or using datasets as part of a future evaluation.

2.11 Following the initial review of datasets and interviews with statisticians and data managers, data from the identified datasets were mapped against items in the ToC to identify the extent to which there was coverage of each item and where there were gaps or limitations in the coverage of data. The findings of the data mapping process are set out in Section 4.

Approach to identifying evaluation priorities

2.12 A series of discussions were held with Welsh Government policy and research officials to consider priorities for a future evaluation of the CfW. This informed the development of draft recommendations which were tested in further sessions.

2.13 The Welsh Government asked members of the CfW expert advisory group to contribute to the process of identifying priorities for a future programme of research and evaluation. Three meetings with members of the expert advisory group were convened to discuss:

- the CfW ToC and critical elements of it which should be the focus of a future evaluation
- the issue of standards, in particular a focus on measuring attainment, in a way that is consistent with the philosophy of the CfW and does not undermine it
- identifying evidence priorities to explore to what extent expected CfW outcomes are being realised and establish an understanding of what works in schools as they develop new approaches to curriculum design and delivery
- the priorities for a future programme of research and evaluation.

A list of expert group members involved in these discussions is included in Annex A.

3. Programme theory

3.1 This section sets out the programme theory underpinning the curriculum and assessment reforms.

An overview of theory of change and its application in the context of the curriculum and assessment reforms in Wales

3.2 Theory of change (ToC) is an approach that explains how a programme (or in this case a process of reform) is intended to achieve its aims and objectives, by making explicit the assumed links between inputs, activities, outputs, outcomes, and long-term effects. The approach provides an opportunity to reflect on early and medium-term changes that may result from a programme, and the factors that influence them in different contexts. The Magenta Book, the UK Government's guide to evaluation, states that understanding the ToC requires:

> an understanding of how the intervention is expected to work in practice, e.g. the problem the intervention aims to address; the change it aims to bring about; the causal chain of events that are expected to bring about the change; the main actors; the groups expected to be impacted; and the expected conditions required for the intervention to succeed;
>
> exposing the assumptions upon which the intervention is based and the strength or weakness of the evidence supporting these assumptions;
>
> an examination of the wider context, such as other policy changes or changes in economic, social and environmental factors;
>
> designers and implementers of the intervention have the opportunity to stress-test the intervention design and ensure they agree on how the intervention is expected to work.
>
> (HM Treasury 2020:24)

3.3 This chapter articulates a ToC for the curriculum and assessment reforms. It presents and challenges the assumptions upon which the reforms are based, with reference to the evidence gathered during the study. Discussions with members of the Curriculum for Wales (CfW) expert advisory group concluded that there are few examples of evaluations of curriculum reform internationally that follow similar models to the CfW. It was suggested that the future programme of research and evaluation should challenge, support and further clarify the assumptions presented in the ToC, thereby contributing to continued 'theory building'. This evidence base should be used to support curriculum realisation and inform the ongoing refinement of the ToC.

3.4 The development of the ToC has drawn on a range of policy and guidance documents (see Section 2.2) and recognises the inter-dependencies between the CfW and initiatives across the wider system. In its recently published school improvement guidance the Welsh Government has set out eight contributory factors, describing the key attributes that schools that are successfully realising the curriculum will possess.[5] These key factors are also embedded in the ToC – either as activities (in the case of professional learning and enquiry, and effective self-evaluation under the new evaluation and improvement framework), or as outcomes (in the case of well-being, co-construction, learner and community voice, and all learners making progress).

3.5 Finally, the ToC also recognises the relationships between the reforms and external economic, social and environmental factors. However, the refinement of the ToC will require exploration and further analysis of these factors over time, drawing on the findings of the programme of research and evaluation.

3.6 A ToC can be applied at different points in the life cycle of a programme or project:

> 'theory of change thinking can be applied at different stages through the programme cycle [...]. These include pre-planning stages of scoping and strategic analysis, design and planning, and throughout implementation. It can be used to support [...] implementation decision-making and adaptation; to clarify the drivers, internal and external, around an existing initiative; monitor progress and assess impact.' (Vogel 2012:12)

3.7 In the case of CfW developments, the ToC will be used over the coming months to support the design of future research and evaluation activity (see Section 5). By

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[5] Eight contributory factors, from Welsh Government (2022d): *School improvement guidance: framework for evaluation, improvement and accountability*
1. Enabling all learners, and in particular those from disadvantaged backgrounds, to progress along their own learning pathway and raise their aspirations to achieve their full potential, allied to a range of assessment approaches to understand and support this progress.
2. Co-constructing a curriculum, in line with the Curriculum for Wales Framework, which promotes a broad range of knowledge, skills and experiences (including social and interactional experiences) with a clear understanding of why these matter.
3. Ensuring the school environment supports learners' and practitioners' well-being.
4. Supporting practitioners' understanding of what works in curriculum design by investing in the enquiry and pedagogic skills of all staff.
5. Enabling ambitious professional learning for all practitioners in a school dedicated to being a learning organisation.
6. Embedding reflection, self-evaluation and improvement within schools, with good school leadership as a pre-condition for that.
7. Being at the heart of their communities - building better relationships between schools and families, communities and employers, to support and promote educational achievement and excellent employment, next steps education and training.
8. Listening to children and young people as they engage with their learning and supporting them in achieving their aspirations.

critically reflecting on the robustness of the ToC, we present observations and considerations aimed at supporting a future research and evaluation programme for the CfW, encompassing evaluation activity focused on the delivery and outcomes of the reforms.

The case for change

3.8 *Successful Futures* (Donaldson, 2015) set out the reasons for embarking on a process of curriculum reform, citing four main drivers.

i. Firstly, the review cited evidence that the relative **performance and levels of achievement** of children and young people in Wales were 'not has high as they could and should be'. Successful Futures referred to evidence from Programme for International Student Assessment (PISA) surveys, national qualifications, Estyn annual reports and the OECD's 2014 report on the school system in Wales. The OECD noted that 'students in Wales perform below average compared to their peers internationally, there is large within school variability in performance' and concluded that current assessment and evaluation arrangements were unsatisfactory.

ii. **A need to address the link between disadvantage and educational achievement:** Successful Futures noted that disadvantage – in its many forms – impacts negatively on learning outcomes and on the well-being of children and people. It emphasised the need for a curriculum that engages the interest of all children and young people and instils high expectations for all.

iii. **Promoting the autonomy and agency of schools and teachers:** Successful Futures noted that a highly prescribed national curriculum and 'powerful accountability mechanisms' had, over time, diminished the professional contribution and creativity of the teaching workforce. CfW was seen as an opportunity for the teaching workforce to shift from being 'implementers' of a prescribed curriculum to active co-constructors of a curriculum that is designed with the specific needs of their school and learners in mind.

iv. **Relevance to today's world and future opportunities:** much has changed since the national curriculum was introduced in 1988 and changes to society,

the economy, and technological advancements require a re-think of the knowledge and skills needed by children and young people to be ready for future challenges. Curriculum and assessment arrangements must equip learners with the softer skills, dispositions and attitudes that will be essential in their lives. A purpose-led curriculum can ensure that young people leave school having experienced a broad education that ensures they can 'thrive in an increasingly complex and rapidly changing world'.

Overview of the ToC for the curriculum and assessment reforms

3.9 At the centre of the curriculum reform process is the change to a purpose-led curriculum. The four purposes are intended to guide what is taught, how it is taught and how learners are supported to progress. A school's curriculum is defined in the CfW guidance as *'everything a learner experiences in pursuit of the four purposes'*. This exemplifies the importance of the learner and their experience as the crux of the reform process. Furthermore the ToC illustrates that learners are actively involved in the curriculum design process and that curriculum reform is continuously informed by learner progression.

3.10 Whilst learners are at the very heart of the reforms, the ToC illustrates that there is a long causal chain before the aspirations for learners are realised. The ToC emphasises the actions of practitioners and the support provided to them by the Welsh Government and partners across the education system. Practitioners are key to the Welsh Government's ambitions for a transformational curriculum. The ToC illustrates that practitioners, schools and other actors across the system are required to engage in a range of activities that will ultimately impact on learners and contribute to the realisation of CfW outcomes. For this reason, practitioner well-being and engagement with the reforms are crucial to the success of the CfW.

3.11 The CfW will provide flexibility for schools and teachers to design their own curriculum, within a clear legislative framework, informed by national guidance and requirements and supported by activity at a system-wide level. The underpinning theory is that, by enabling schools and teachers to have more autonomy to make decisions within a national framework, this will lead to a more relevant curriculum consisting of richer and more authentic learning experiences, which are theorised to enhance learner agency, engagement and motivation. Of specific relevance here is

the expectation that a school's curriculum will be locally relevant, to their parent and carers, and their local community.

3.12 CfW guidance underlines the importance of high-quality pedagogy to successful curriculum realisation. Schools should: *'consider the pedagogical approaches they will need to employ to support learners in realising the four purposes'.* School leaders have an important role to play in ensuring high standards of learning and teaching, drawing on the professional learning opportunities available that support CfW aspirations.

3.13 Schools will adopt a range of assessment approaches that enable the practitioner and the learner to understand where the learner is and what they need to do next. The ToC hypothesises that new approaches to curriculum design, teaching and learning, and assessment will contribute to a range of short-, medium- and longer-term outcomes for learners, practitioners, settings, parents/carers, and other partners across the education system. For learners specifically, this includes progress in relation to their learning, skills and experiences. The development and implementation of a school's curriculum will also support the development of skills and attributes relevant to the four purposes. The transition to the new curriculum and assessment arrangements are assumed to contribute to a range of positive system-wide outcomes, specifically raised standards, increased equity, enhanced employability and greater public confidence in education. That is, through a clear and consistent focus on individual learners and their progression, these wider system benefits will be realised.

3.14 Finally, the ToC illustrates that the reforms will support a broader range of outcomes for society, including contributing to the seven well-being goals included in the Well-being of Future Generations (Wales) Act 2015 and the aims of the *Cymraeg 2050* Strategy (see 3.58).

Structure of the ToC

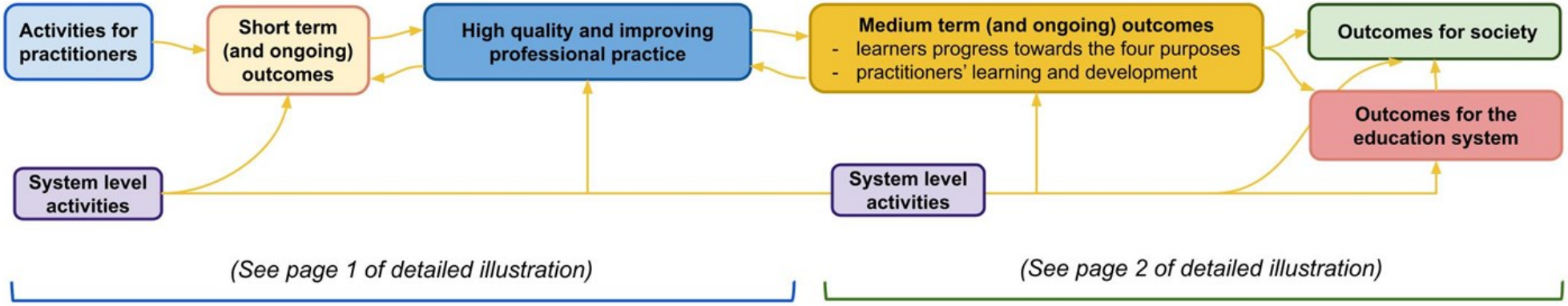
3.15 The ToC is structured as follows.

- **Activities *for* practitioners** in the system, *supporting:*
    - short-term outcomes for practitioners, settings and other system stakeholders.

- **Activities *of* practitioners** (school/setting-level):
    - which also support short-term outcomes relating to human and social capital, building confidence, capabilities and trust.
- Both of the above are supported by **system-level activities** and each of these support:
    - **short-term outcomes** for practitioners, settings and the system as a whole.
    - **medium-term outcomes** for learners, practitioners, parents/carers:
        - towards the four purposes being realised.
    - **longer-term outcomes** (societal):
        - contributing towards the goals set out in the Well-being of Future Generations Act and the *Cymraeg 2050* strategy.

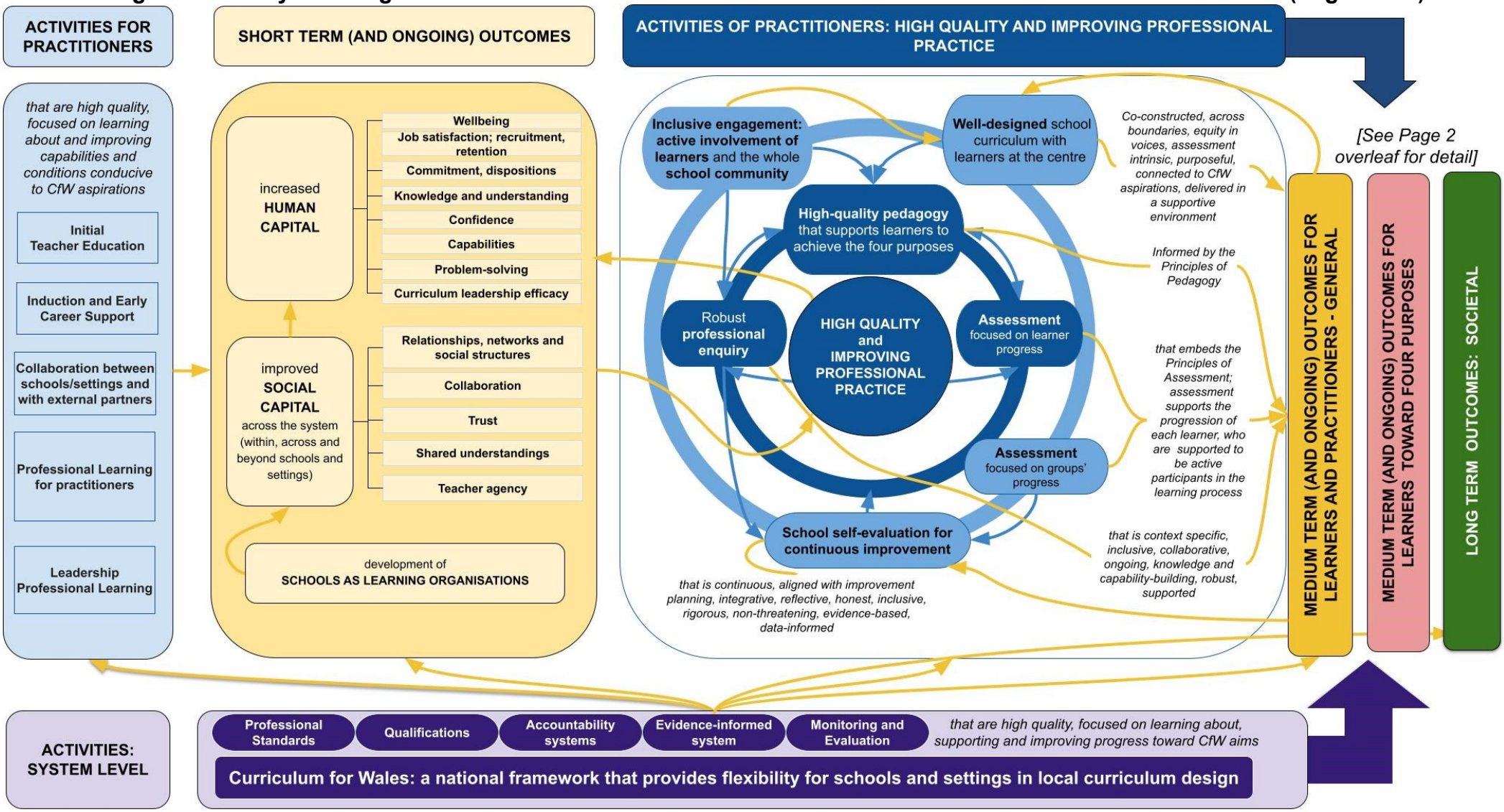
3.16 The ToC is set out in figures 2, 3 and 4 below. Figure 2 provides an overview of the whole ToC, followed by a more detailed breakdown of the illustration in two parts in Figures 3 and 4. The following sections describe each of the phases of the ToC in more detail.

Figure 2. Theory of change (ToC) for the curriculum and assessment reforms – schematic view



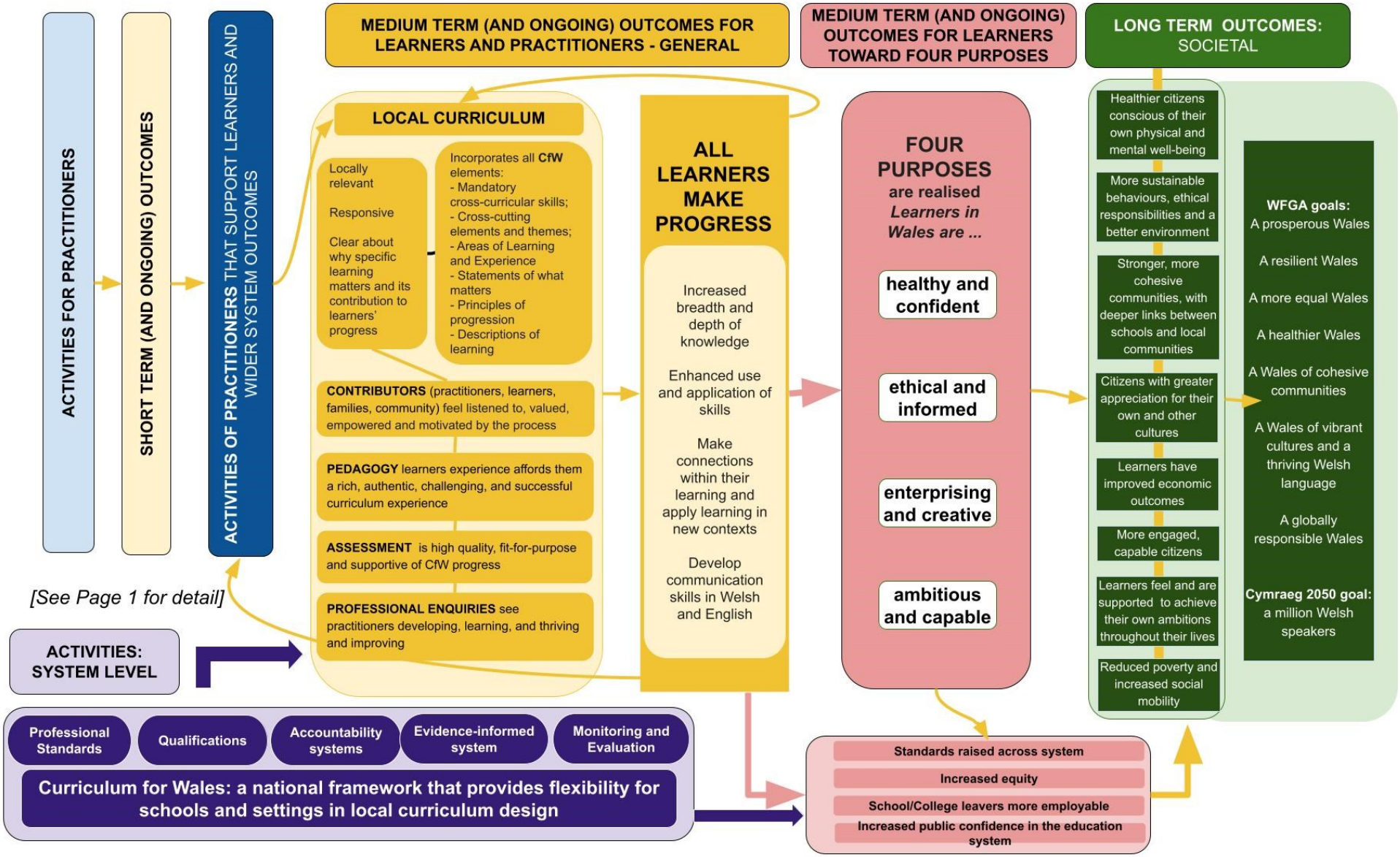
Notes: This figure provides an overview of the ToC. Further detail is provided on each of the coloured segments in the full illustration on the following pages. The purpose of this tool is to serve as an aid to policy and evaluation development. Schools are not expected to use it in their own planning and design.

Figure 3. Theory of change for the curriculum and assessment reforms: activities and short-term outcomes (Page 1 of 2)[6]



[6] The purpose of this tool is to serve as an aid to policy and evaluation development. Schools are not expected to use it in their own planning and design.

Figure 4. Theory of change for the curriculum and assessment reforms: medium- and long-term outcomes (Page 2 of 2)[7]



[7] The purpose of this tool is to serve as an aid to policy and evaluation development. Schools are not expected to use it in their own planning and design.

Activities for practitioners

3.17 As noted above in Section 3.7, the ability of schools and practitioners to design a curriculum that delivers the intended benefits to learners requires the provision of support to practitioners to create the conditions for the successful realisation of CfW. This section outlines a range of activities targeted at practitioners and describes the short-term outcomes that will derive from them. These short-term outcomes will foster the skills, dispositions and behaviours among practitioners which, in turn, will support the medium and longer-term outcomes for learners. The activities for practitioners are organised as follows:

- Initial Teacher Education (ITE), induction and early career support.
- Collaboration between schools and with external partners.
- Professional learning for practitioners.
- Professional learning for leadership.

3.18 The section also outlines how these activities for practitioners will, in theory, support increased human capital and improved social capital that are prerequisites for successful curriculum reform (see 3.22).

Initial Teacher Education (ITE), induction and early career support

3.19 The ToC hypothesises that ITE and early career support equip new entrants to the teaching profession with the necessary knowledge and understanding to support the realisation of CfW. ITE programmes focus on developing trainee teachers' skills, knowledge and behaviours (in relation to pedagogy, collaboration, innovation, professional learning, and leadership) that are consistent with the vision and values of CfW. Induction programmes and early career support embed working practices and professionalism that ensure high standards among practitioners. The long-term aspirations of CfW, to which with the professional standards for teaching and leadership (PSTL) are aligned, set a pathway for new entrants to the teaching profession.

3.20 The ToC underlines the need for practitioners to recognise from the beginning of their careers that they are a significant part of the curriculum reform process and that they can contribute in meaningful ways to the mission to build a world class education system in Wales. New entrants to the profession have the skills and

dispositions they need to support CfW, and meet the induction level descriptors for teaching set out in the professional standards.

Assumptions relating to ITE, induction and early career support
○ ITE partnerships, practitioners and mentors develop new entrants to the teaching profession who understand, are committed to, and are prepared for the CfW. ○ ITE programmes reflect the vision of CfW and programme content is aligned with national guidance. ○ Inspection arrangements provide appropriate support and challenge to ensure that ITE programmes are of high quality and support the realisation of CfW.

Collaboration between schools/settings and with external partners

3.21 Collaboration and co-construction are fundamental to the curriculum reform process. This includes collaboration between schools at the local and regional levels, through local clusters and other networks. The National Network brings together practitioners, academic experts, regional consortia, Estyn, policy makers and other organisations to identify and address barriers to, and opportunities for, the implementation of CfW. It provides opportunities for conversation, co-construction, joint enquiry and problem-solving activity, drawing on the expertise of a range of education professionals with different perspectives. Collaboration between schools and settings to develop a shared understanding of progression will be critical during the early stages of curriculum roll-out, with school improvement partners playing an important role in facilitating activity.

3.22 Collaboration will support an understanding across the wider education system of progress being made in curriculum implementation, along with an understanding of the challenges faced and responses to these challenges. The networks established and the relationships developed will enable practitioners to identify appropriate ways of overcoming challenges through partnership working and co-construction. Collaboration between schools that involves senior leaders, middle leaders and practitioners will mean that implementation is supported and driven at all levels.

Assumptions relating to collaboration between schools and with external partners
○ There is commitment among schools at all stages of their curriculum realisation journey to working collaboratively. ○ There is equitable opportunity to participate in national, regional and local networks to support curriculum realisation. ○ There is appropriate balance between challenge and support, resulting in collaborative activity that is productive, and does not undermine schools' preparations.

Professional learning for practitioners

3.23 The ToC for the CfW assumes that the system ensures the widespread availability of high-quality professional learning opportunities to support curriculum realisation and that practitioners are able to access such opportunities. High-quality professional learning is critical to the success of the reforms. Professional learning is organised around the long-term vision for learners. It is highly differentiated and contextualised, reflecting the needs of practitioners. It uses expertise alongside peer support and involves exploration of the impact of practice on learners. Professional learning can help challenge and change the status quo. It can also promote networking opportunities and encourage the use of evidence and experiences to explore practitioner behaviours and beliefs.

3.24 The Schools as Learning Organisations (SLO) model is used as the school-level framework to identify and support the professional learning needs of practitioners. Through this process schools are able to identify key strengths, areas for development and ways of working to enable all staff to develop and improve their professional practice. Individual Professional Learning Journeys enable individual ownership of learning requirements and processes over realistic time periods.

3.25 The ToC proposes that high-quality professional learning increases human capital and improves social capital in ways that enhance professional practice. There is a strong culture of professional learning across the system, driven by practitioners who frame their own development as practitioners in the context of the curriculum and assessment reforms, to the professional standards for teaching and leadership.

Assumptions relating to professional learning for practitioners
○ There is equitable opportunity to engage in high quality professional learning delivered by school improvement services and other partners. ○ Priorities for professional learning are based on robust assessments of strengths and areas for development, including through the use of the Schools as Learning Organisations methodology. ○ High-quality professional learning is sustained and is organised around a school's vision for learning and for their learners. It is highly differentiated and contextualised. It uses specialist expertise alongside peer support and involves exploring evidence of the impact on learners.

Professional learning for leadership

3.26 The ToC underlines the importance of high-quality professional learning to support leadership. Professional learning should focus on the capabilities needed to lead curriculum change in a way that supports the vision and requirements set out in national CfW guidance. These capabilities include deep knowledge of the curriculum requirements, strong interpersonal and problem-solving skills, and capabilities to develop networks and strengthen trust within and across schools. Over time the programme of professional learning will expand the pool of curriculum leaders across the system.

3.27 This activity will support a range of outcomes that are important to the realisation of CfW. Firstly, the support will deliver increased curriculum leadership efficacy and an improved capability among leaders to support developments in human capital (see Section 3.25). Leaders will be better able to foster an environment, culture and conditions conducive to curriculum change. This includes supporting a culture of enquiry and of continuous improvement among practitioners. Leaders will be better equipped to support engagement with research and evidence-informed practice.

Assumptions relating to professional learning for leadership
○ There is equitable opportunity to engage in professional learning for leadership that is quality-assured and innovative. ○ Professional learning is accessed by all leaders over time. ○ It includes opportunities to engage in formal and informal PL. ○ Professional learning is designed to equip leaders with the skills and knowledge to support the realisation of the four purposes. ○ High quality professional learning develops both content knowledge and interpersonal skills; and provides multiple opportunities to learn with ongoing intervention and feedback.

Activities for practitioners and increased human capital

3.28 The ToC suggests that the activities for practitioners described in the preceding sections will contribute to **increased human capital outcomes** that are important to supporting curriculum realisation. These increases in human capital include improvements in skills and knowledge; greater practitioner well-being; enhanced job satisfaction; and benefits to recruitment and retention. The theory also proposes that collaboration and professional learning will instil a culture of continuous improvement among practitioners and ensure there is commitment to realising the aims of CfW. The activities for practitioners will increase both knowledge and understanding of curriculum change and also the skills and behaviours required to implement the reforms.

3.29 ITE and professional learning will instil among practitioners the confidence to experiment and try new practices and the capabilities to practice in ways that realise curriculum aspirations. Activities for practitioners will support increased problem-solving capabilities, which are critical given the shift towards greater practitioner autonomy in curriculum design and delivery. Finally, professional learning will also enhance leaders' efficacy in leading change, and their capability to do so effectively.

Collaboration and professional learning supporting improved social capital

3.30 The ToC illustrates that the range of activities for practitioners will support **improved social capital**. Firstly, the activity described above will strengthen the relational ties within and between schools. These relationships will support the ability and readiness of schools to call on expertise where necessary to support curriculum realisation and to work reciprocally by demonstrating a willingness to share ideas and resources. Strong relational ties – which are key to the success of CfW – will help reduce fragmentation across the system as the reforms progress.

3.31 Other social capital outcomes linked to the activities for practitioners are enhanced collaboration and joint working; trust between practitioners, providers, parents/carers and other stakeholders; shared understandings about, and expectations for, curriculum change; and a greater sense of agency in relation to the curriculum.

System-level activities

3.32 This section outlines a range of system-level activities that provide the framework and enabling conditions to support the curriculum and assessment reforms. These system-level activities include:

- the Curriculum and Assessment (Wales) Act 2021, and national CfW legislation and guidance setting out curriculum reform expectations and requirements
- professional standards for teachers, leaders, teaching assistants (TAs) and higher-level teaching assistants (HLTA)
- qualifications
- accountability systems, including inspection arrangements
- activities to support an evidence-informed system
- monitoring and evaluation activity.

It should be noted that this is not an exhaustive list and there are also other regional and national support and school improvement arrangements that will underpin and facilitate curriculum reform.

National curriculum framework and school curriculum design

3.33 Central to the curriculum and assessment reforms is the development of a national framework that enables flexibility in curriculum design. The CfW Framework is set out in primary and secondary legislation and in supporting guidance. This includes mandatory curriculum requirements which schools must incorporate into their planning and delivery. Beyond the curriculum requirements schools have discretion as to how they design their curriculum.

Assumptions relating to the national framework and school curriculum design
○ Practitioners have the capability to co-construct a curriculum that reflects their context and meets the needs of their learners. ○ In doing so, practitioners are operating within a national structure and are able to draw on national guidance and support from partners across the education system.

Professional standards

3.34 Professional standards describe the skills, knowledge and behaviours that characterise excellent practice and support professional growth for teachers, leaders, and those who assist teaching. The standards have been developed to reflect practice that is consistent with the realisation of the new curriculum. The ToC assumes that the professional standards are applied and that there are arrangements in place to evaluate their coherence in relation to the requirements of CfW for practitioners.

Assumptions relating to professional standards
○ Professional standards become established as the overarching values that drive the dispositions and behaviours of practitioners, supporting high quality and improving pedagogy.

Qualifications

3.35 A new suite of qualifications is being developed that is aligned with and supports the aims of CfW. This takes the form of a re-shaped qualifications offer for learners aged 14-16 designed to ensure that learners can choose from a bilingual range of

qualifications that support the CfW and help to prepare learners for continued learning, life and work. The new qualifications contribute to a coherent and inclusive offer for learners and command public confidence. They also ensure a broad and balanced set of choices for learners in both Welsh- and English-medium schools. They support and promote the approach to knowledge, skills and experience in the CfW. In time the new qualifications framework supports outcomes for learners, contributes to equity of opportunity for all learners, and helps ensure school and college leavers are more employable.

Assumptions relating to qualifications
○ Qualifications are aligned with the vision of CfW and support the development of skills and attributes that help realise the four purposes. ○ Qualifications are designed in such a way as to ensure there can be variation across schools in the specific topics and content explored. ○ Qualifications support both medium and longer-term outcomes for learners set out in the CfW framework. ○ The suite of qualifications available enables learners to choose their own learning pathway in an inclusive and equitable way.

Accountability systems

3.36 School inspection arrangements provide fair and rigorous evaluations of the quality of leadership, teaching and learning in settings, including the quality of curriculum content and the well-being of practitioners and learners. The ToC also highlights the importance of robust school-level accountability systems: governing bodies lead and hold settings to account in ways that drive continuous improvement.

Assumptions relating to accountability arrangements
○ Accountability arrangements ensure that good practice and challenges in curriculum implementation are identified; they support increased standards at individual setting level and across the wider system.

Activities to support an evidence-informed system

3.37 High quality research is accessible to practitioners at all levels and is used to inform innovations and improvements to practice. Practitioners in schools and education professionals in local authorities and regional consortia are supported to both consume and produce research and enquiry. Curriculum, assessment and pedagogy are prioritised in the National Strategy for Educational Research and Enquiry.

3.38 The ToC indicates that the effective use of research evidence by practitioners can increase their capacity to reflect critically on the implementation of the new curriculum and their contribution to the realisation of the CfW aspirations. Further outcomes are that evidence informs curriculum implementation and contributes to system improvement. Practitioners will both consume and create evidence on curriculum, teaching and learning in ways that strengthen the extent to which the profession is evidence-informed.

Assumptions relating to the use of evidence across the system
○ There is support in place to develop research literacy and research and enquiry capability among practitioners. ○ The quality and relevance of research supports curriculum reform and continuous improvement at school and system levels. ○ Research evidence is shared through collaboration within and between settings. ○ Research evidence is also shared by and between other partners across the system, including regional consortia, higher education institutions and other partners.

Monitoring and evaluation activity

3.39 As part of the scoping study, a series of guiding principles has been identified that should inform approaches to monitoring and evaluating the curriculum and assessment reforms. A programme of evaluation should:

- examine whether the vision and requirements set out in the national CfW framework are realised through the actions of schools and the wider education system

- have learners, and understanding learner progression, at its heart
- focus on activities, outcomes and the relationships between them
- take a whole-system view and focus on understanding system change/improvement
- take a long view, including longitudinal research designs alongside other methodologies
- take a broad view – incorporating detailed research into novel aspects of the reform alongside more established (traditional) challenges
- inform system learning continuously – and include both planned and responsive activity
- Recognise the diverse linguistic contexts across the system and reflect the commitments by the Welsh Government and partners to support learners' Welsh language skills development[8]
- Build trust in the evaluation process - among those who contribute to it and among audiences for the research
- Use efficiencies and draw on existing expertise to support the evaluation process.

3.40 There is a need for clear system-level processes to monitor and evaluate progress towards the objectives and intended outcomes of the curriculum reforms. This will capture changes in human and social capital and in professional practice, and links between these and learner progress. Monitoring and evaluation at the system-level takes account of, and learns from, setting-level monitoring and evaluation processes. The ToC illustrates that this will support system-wide feedback and learning about curriculum implementation that informs priorities and approaches across the whole system. It will also support increased public understanding of, and support for, CfW outcomes.

[8] See commitments set out in *Cymraeg 2050: a million Welsh speakers* (Welsh Government, 2017c); *Guidance on Welsh in Education Strategic Plans* (Welsh Government, 2021k); Guidance on School Categories according to Welsh-medium provision (Welsh Government, 2021l); Consultation on a Framework for Welsh in English-medium education (May 22).

Assumptions relating to monitoring and evaluation activity
○ That there will be investment in monitoring and evaluation at setting- and at system-level. ○ Evaluation will be used to inform curriculum reform priorities for action and approaches. ○ Evaluation, guided by the principles outlined above, will contribute to increased public confidence in, and understanding of, new curriculum arrangements in Wales.

Activities of practitioners

3.41 This section describes a series of activities to be carried out by practitioners to support the realisation of the curriculum. Each of these activities is based on, and supports, a commitment to high quality and continuously improving professional practice and will contribute to positive outcomes for learners, teachers, schools and others.

3.42 This aspect of the ToC recognises that the various areas of professional practice – pedagogy, professional enquiry, assessment, curriculum design, self-evaluation – are interdependent. Work in each area of practice both informs and draws on practice in other areas.

A well-designed school curriculum drawing on engagement with learners and the wider community

3.43 Drawing on national CfW guidance and the support of partners across the system, practitioners engage in the co-construction of their curriculum. In doing so, they work in an inclusive way with colleagues, learners, parents/carers and the wider school community. Learners, in particular, are actively involved in a school's approach to curriculum design and development. Curriculum design works across traditional boundaries: leaders and practitioners work across disciplines, collaborate with other schools and with a range of stakeholders. There is inclusivity and equity in the voices that inform and provide direction to the curriculum. Schools ensure that they listen to the voices of children and young people as they learn. Learning is organised in ways that respond to learner needs, providing appropriate challenge and support.

3.44 The design of assessment arrangements is an intrinsic part of the process of developing a curriculum. The ToC assumes that schools and practitioners are clear about the specific role of each assessment being undertaken, and what the understanding gained from assessment will be used for and why. Practitioners should be prepared to challenge and question how assessment contributes to learners realising CfW's vision and aspirations.

Assumptions relating to the design of school curricula
○ That settings have the time and resource to think and engage with curriculum design. ○ The views of learners are collected and used as part of schools' curriculum design. ○ That practitioners have the skills and capability to contribute to curriculum design in line with the requirements set out in national guidance and in legislation. ○ That school curricula are suitably aspirational and place high expectations on learners in line with the vision of CfW. ○ That settings engage with relevant partners as part of their curriculum design.

High quality pedagogy

3.45 As it is implemented, a school's curriculum should be supported by high-quality pedagogy that is informed by the twelve pedagogical principles. The principles maintain that good learning and teaching:

- maintains a consistent focus on the overall purposes of the curriculum
- challenges all learners by encouraging them to recognise the importance of sustained effort in meeting expectations that are high but achievable for them
- employs a blend of approaches including direct teaching
- employs a blend of approaches including those that promote problem-solving, creative and critical thinking
- set tasks and selects resources that build on previous knowledge and experience and engage interest
- creates authentic contexts for learning

- employs assessment for learning principles
- ranges within and across Areas
- regularly reinforces the cross-curricular skills of literacy, numeracy and digital competence, and provides opportunities to practise them
- encourages learners to take increasing responsibility for their own learning
- supports social and emotional development and positive relationships
- encourages collaboration.

3.46 High quality professional practice, informed by effective pedagogy, supports a range of medium-term outcomes for learners (see Section 3.50).

Assumptions relating to professional practice in curriculum delivery
○ That curriculum delivery is underpinned by high-quality pedagogy. ○ That professional practice is informed by the twelve pedagogical principles set out in CfW guidance. ○ That high-quality pedagogy supports and contributes to the medium and longer-term outcomes for learners set out in the ToC.

Assessment for supporting learner progression

3.47 As part of the development of their school's curriculum practitioners develop assessment approaches that embed the principles of assessment.[9] These principles recognise that the purpose of assessment is to support the progression of each individual learner in relation to the 3 to 16 continuum. Learners are at the heart of assessment and should be supported to become active participants in the process. All learners, particularly those from disadvantaged backgrounds, are enabled to progress along their own learning pathway and raise their aspirations. Curriculum, assessment and pedagogy form part of an integrated approach to teaching and learning. A shared understanding of progression, developed through professional dialogue, is integral to curriculum design and improving learning and teaching. Learning across the breadth of the curriculum should draw on a wide

[9] The Welsh Government has published guidance on assessment for supporting learner progression which sets out the purpose and principles of assessment (Welsh Government, 2022b). This guidance focuses on supporting learner progression from ages 3 to 16 as an integral part of learning and teaching and distinguishes this from assessment for the purposes of awarding external qualifications.

range of assessment approaches, building a holistic picture of the learner's development. Assessment has three main roles as part of the process of enabling learning progression.

- Supporting individual learners on an ongoing, day-to-day basis.
- Identifying, capturing and reflecting on individual learner progress over time.
- Understanding group progress in order to reflect on practice.

Assumptions relating to assessment
○ Schools and settings develop high-quality and fit-for-purpose assessment approaches that are focused on supporting the progression of each individual learner. ○ Assessment also provides insights into groups' progress in relation to the broader aims of CfW to raise standards. ○ Schools and settings use assessment information to inform teaching and learning; to help learners understand their own progress; and to communicate progress to parents/carers.

School self-evaluation for continuous improvement

3.48 The ToC also illustrates that assessment will help settings understand groups' progress and should also inform settings' self-evaluation. Self-evaluation should be continuous and aligned with improvement planning; reflective, honest, inclusive, and rigorous; evidence-based, using a range of relevant and reliable data.

Assumptions relating to self-evaluation for continuous improvement
○ Settings develop robust self-evaluation processes which support continuous improvement in line with CfW aspirations. ○ Approaches to self-evaluation are supported by local and regional school improvement activity. ○ The outcomes of self-evaluation are not used by local and regional partners to compare settings or as performance measurement data.

Robust professional enquiry

3.49 The ToC for the curriculum reforms asserts that practitioners and schools examine new educational ideas and developments in their own situations. All members of the school community - leaders, teachers, learning support workers, learners, parents and carers and the wider community - are involved and contribute to curriculum design. Professional enquiry should be collaborative, allowing practitioners and others to work together to identify challenges and how best to overcome them. Professional enquiry should also be an ongoing process rather than a time-prescribed consultation or review. It should build upon the existing knowledge, skills and experience of practitioners and other colleagues. Finally it should allow practitioners to critique their current practice and investigate new approaches that will have to be adopted in future.

Assumptions relating to professional enquiry
○ Settings encourage and support practitioners to engage in robust professional enquiry that enhances professional practice and supports the realisation of CfW.

Medium-term outcomes for learners, practitioners, parents/carers

3.50 Collectively the system-level activities and the activities of practitioners will support a range of medium-term outcomes. These outcomes will be:

- the design and realisation of a school curriculum, incorporating all curriculum elements as required in legislation and guidance
- outcomes for learners
- outcomes for settings and for practitioners
- outcomes for parents/carers.

3.51 It should be noted that the following sub-sections do not list specific assumptions that relate to the various medium-term and longer-term outcomes, as done in preceding sections. There is one fundamental assumption that underpins the ToC, which is that the combination of activities at system-level and the activities of practitioners collectively lead to the outcomes for learners, for schools, for the wider education system and, ultimately for society. Secondly, it should be assumed that a range of external factors will influence the extent to which the outcomes set out

below will be achieved. These external factors could range from large-scale events that cause disruption to the education system (as seen in recent years), to changes to policy and legislation, through to more local factors and conditions at school or community level. Socio-economic conditions and variables are also likely to influence the outcomes achieved through the reforms. The recommended studies set out in chapter 5 of this report will need to examine the influence of external factors and co-dependencies on the progress and outcomes of the CfW reforms.

Curriculum design

3.52 School curriculum design incorporates all curriculum elements – Areas of Learning and Experience; mandatory cross-curricular skills; and cross-cutting elements and themes. Practitioners, in contributing to curriculum design, are clear about why specific learning matters and how it will contribute to learners' progress. Contributors to the curriculum design process – including practitioners, learners, parents/carers and the wider school community – feel listened to, valued, empowered and motivated by the process.

Medium-term outcomes for learners

3.53 The delivery of the new curriculum, underpinned by high quality pedagogy, supports a range of medium-term outcomes for learners:

- They express satisfaction in their learning; they are engaged in and excited by the curriculum they experience
- They have their needs met as they develop and improve their skills, knowledge and understanding over time
- They feel challenged to explore ambitious possibilities and supported to meet high expectations
- They experience teaching and learning that is wide-ranging, authentic, integrated, inclusive and equitable
- They recognise the role they can play in decisions about their own learning.
- They have opportunities to apply learning in new contexts and extend skills
- They make links between Areas of Learning and Experience, and between what they are learning across time and across contexts

- They can communicate effectively in different forms, in Welsh and English.

3.54 Assessment approaches, integrated within school curricula also support medium-term outcomes for learners. Learners' experience assessment as an embedded and day-to-day part of the curriculum. Learners understand where they are in their learning, where they need to go next, and how to make progress. They also respond actively to feedback on their learning, review and articulate their learning progress.

Medium-term outcomes for practitioners and schools

3.55 Assessment approaches, which embed the principles of assessment set out in CfW guidance, will support a range of outcomes for practitioners and schools. They will contribute to practitioners and schools:

- having a holistic picture of their learners' strengths, ways of learning, any barriers and areas for development
- understanding and – where appropriate – recording all learners' progress over time
- providing feedback and communicating next steps in learning to learners and parents/carers
- understanding whether different groups of learners are making expected progress, including disadvantaged learners, those with additional learning needs and those with protected characteristics
- identifying and planning strategies to address attainment gaps, drawing on evidence of high impact practices most likely to address gaps
- enabling learners to begin or continue their journey towards becoming bilingual citizens.

3.56 Professional enquiry activities (as described in Section 3.48) will contribute to practitioners developing their professional knowledge, understanding, confidence and capabilities for high quality and improving curriculum design, pedagogy and assessment. The ToC notes that this will support a growth in the pool of practitioners with high levels of curriculum, pedagogy and assessment expertise. Professional enquiry will also help ensure that problems and challenges associated with curriculum delivery, pedagogy and assessment to support progression are identified, addressed and resolved.

Medium-term outcomes for parents/carers and external partners

3.57 Parents and carers will also benefit from the assessment approaches adopted in schools in realising the CfW. The ToC assumes that parents and carers:

- engage regularly with schools to understand and support their child's progression in learning
- understand where their child is in their learning, where they need to go next, and how
- respond actively to information on their child's learning.

Learner progress

3.58 The ToC hypothesises that the development and implementation of the curriculum and the support available to sustain school improvement will contribute to all learners making progress in a range of ways. Firstly, curriculum delivery will lead to learners increasing their breadth and depth of knowledge, including a deep understanding of the ideas and disciplines within the Areas of Learning and Experience. A further outcome will be increased learner effectiveness, evidenced by a growing sophistication in the use and application of skills. Learners will make connections across Areas and transfer learning into new contexts. Additionally, all learners will make progress in their use of Welsh in their daily lives. The ToC recognises that this is a cyclical and iterative process: learner progression will be used by schools to inform curriculum design on an ongoing basis and will support schools' self-evaluation activities.

Medium-term outcomes towards the four purposes

3.59 As a result of their experiences of learning and progression, as set out in the earlier sections of the ToC, learners will develop the skills, knowledge and attributes associated with the realisation of the four purposes. All learners in Wales are supported to be:

- 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 and confident individuals, ready to lead fulfilling lives as valued members of society.

System-wide outcomes

3.60 The ToC proposes that the progress made by learners supports a number of important ongoing outcomes.

- Attainment is improved across the education system.
- The progress made by all learners contributes to increased equity in the education system.
- School and college leavers are more employable.
- There is increased public confidence in the education system.

Longer term societal outcomes

3.61 The outcomes for learners and the system-wide outcomes noted above are hypothesised to contribute towards a range of longer-term outcomes at the wider societal level. The Welsh Government's *Curriculum for Wales implementation plan* notes that *'education reforms connect and contribute to our goals as a nation, set out in the Well-being of Future Generations (Wales) Act 2015'* (Welsh Government, 2021a). It sets out the links between national well-being goals and the long-term outcomes of the CfW as follows:

Well-being goal	Long-term outcomes of CfW
A prosperous Wales	More employable school and college-leavers with access to decent work.
	More engaged, capable citizens
A resilient Wales	More sustainable behaviours, ethical responsibilities and a better environment.
A more equal Wales	Reduced poverty and increased social mobility. Closing the attainment gap.
A healthier Wales	Healthier citizens conscious of their own physical and mental well-being.
A Wales of cohesive communities	Stronger, more cohesive communities, with deeper links between schools and their local communities.
A Wales of vibrant cultures and thriving Welsh language	Citizens with greater appreciation of their own and other cultures. Greater use of the Welsh language.
A globally responsible Wales	More self-aware citizens who make better decisions and demonstrate sustainable behaviours

3.62 These outcomes describe the anticipated benefits to wider society as learners embody the four purposes over time. By seeking to ensure greater use of the Welsh language, the CfW also supports aspects of the Cymraeg 2050 Strategy which includes targets to increase the use of Welsh. The extent to which these assertions about the contribution of CfW to wider outcomes are borne out over time will be tested as part of the programme of research and evaluation.

4. Data mapping

4.1 This section presents the findings of the data mapping process which examined the data that are available against research and evaluation questions, which explore activities, outcomes and impacts set out in the theory of change (ToC).

4.2 A range of data sources were identified through the data mapping process which relate to each of the sections of the ToC, namely:

- activities *for* practitioners
    - short-term outcomes
- activities *of* practitioners
- activities of the system
    - short term outcomes: system
- medium-term outcomes for learners, practitioners, parents/carers
- longer-term outcomes (societal).

4.3 A description of the identified data sources that relate to each of the above sections of the ToC is included in Annex B. The types of data sources include government administrative datasets, national participation and attainment data, education survey data, Estyn inspection evidence and ad hoc research and evaluation studies. These data sources are managed by a variety of organisations including Welsh Government and other education stakeholders. For most of the data sources identified, regular data, reports or statistical bulletins are published although some of the sources are not routinely published.

4.4 The data mapping process has identified many data sources which relate to each of the individual items within the ToC. However, few of these sources examine the linkages and pathways between items, and this therefore limits the extent to which the programme theory can be tested empirically using existing sources of secondary data.

4.5 Our analysis reveals that currently available data would provide a partial or, in some cases, limited evidence base in relation to the research and evaluation questions identified (See Table 1). Consequently, there is a need to design and deliver a programme of research and evaluation that produces the data and insights to understand the effectiveness and outcomes of the curriculum reform process. In doing so, there is a need to draw on ongoing or planned research and data

collection activity that can inform the evaluation process and link to work being carried out by Welsh Government to help define a new data and information ecosystem for the school system in Wales to support the Curriculum for Wales (CfW).[10] This process could include consideration of how collection processes for data sources set out in Annex B could potentially be amended or influenced by the Welsh Government in future so that they gather data that is more closely aligned with the ToC items and pathways. These sources include:

- the National Survey for Wales
- the SHRN - School Environment Questionnaire for the Welsh Network of Healthy School Schemes
- Welsh in Education Strategic Plans (WESPs)
- future Estyn thematic reviews (the focus of these would be determined annually by the Welsh Government and Estyn).

4.6 A summary of the data mapping findings are presented in Table 1 which sets out:

- sections and items from the ToC (in columns A and B. Row colours correspond to stages in the ToC)
- a series of research and evaluation questions related to the items and pathways between items set out in the ToC (in column C)
- the extent to which the available data would enable these research and evaluation questions to be answered at national level (in column D)
- whether further research is proposed as part of a future evaluation of the CfW (in column E), as well as references to the proposed studies presented in Section 5 which would address these questions.

[10] The Welsh Government has commissioned research into data and information needs and uses across the school system in Wales. The research will provide an evidence base to help define a new data and information ecosystem for the school system in Wales to support the ambitions of Curriculum for Wales. See Research into the data and information needs and uses in the school system in Wales - Hwb (gov.wales).

Table 11. Summary of data mapping against the research and evaluation questions

A. ToC section	B. ToC item	C. Research and evaluation questions	D. Extent to which data enable questions to be answered nationally	E. Further research proposed?
Activities *for* practitioners	ITE, Induction and Early Career Support	**To what extent does ITE, Induction and Early Career Support enable NQTs to:** • **believe that they are, from the beginning, a significant part of the curriculum reform effort and that they can contribute fully to the mission to build a world class education system in Wales?** • **have the knowledge, skills and dispositions to take their part in realising CfW?** • **meet the induction level descriptors for teaching within the professional standards?**	Partially	Yes (See Studies 1, 5, 7 in Section 5)
	Collaboration between schools/ settings and with external partners	**To what extent does collaboration between schools/settings and with external partners support:** • **system understanding of implementation progress, challenges and responses to challenges?** • **approaches to overcoming challenges being co-constructed?** • **networks being established and relationships developed?** • **implementation being supported and driven at all levels?**	Partially	Yes (See Studies 1, 5, 7, 8, 9 in Section 5)
	Professional Learning for practitioners and leadership professional learning	**To what extent does Professional Learning for practitioners and leadership professional learning support:** • **increased capacity for practitioners to learn continuously and respond flexibly in ways that support improvements in curriculum, pedagogy, and assessment?** • **cultural shift conducive to professional learning?** • **professional learning is driven by practitioners who frame professional growth in the context of the four purposes of CfW?**	Partially	Yes (See Studies 1, 5, 7, 8, 9 in Section 5)

A. ToC section	B. ToC item	C. Research and evaluation questions	D. Extent to which data enable questions to be answered nationally	E. Further research proposed?
Data relating to short term outcomes for practitioners, settings and the system	Increased human capital	**To what extent do the activities *for* practitioners support increased human capital?**	Partially	Yes (See Studies 1, 4, 5 in Section 5)
	Improved social capital	**To what extent do the activities *for* practitioners support improved social capital?**	Not at all	Yes (See Studies 1, 4, 5 in Section 5)
	Development of schools as learning organisations	**To what extent do the activities *for* practitioners support the development of schools as learning organisations?**	Not at all	Yes (See Study 4 in Section 5)
Data relating to activities *of* practitioners	Inclusive engagement; Well-designed curriculum	**To what extent have schools/settings developed curriculum and assessment arrangements in line with the national framework?** **To what extent have settings engaged inclusively with various partners as part of their curriculum development activity?**	Partially	Yes (See Studies 1, 6 in Section 5)
	School self-evaluation for continuous improvement	**To what extent are settings' self-evaluation processes for continuous improvement: aligned with improvement planning; Integrative; reflective; honest; inclusive; rigorous; non-threatening; evidence-based and data-informed?**	Partially	Yes (See Studies 1, 6 in Section 5)
	High quality and improving professional practice	**To what extent are schools and settings' assessment processes, focused on individuals' and groups' progress, high quality, fit-for-purpose and support each individual learner to progress?** **To what extent is there high-quality pedagogy, including whether professional practices at setting level are driven by the pedagogical principles?** **To what extent is there robust professional enquiry that supports the realisation of CfW?**	Partially	Yes (See Studies 1, 6 in Section 5)

A. ToC section	B. ToC item	C. Research and evaluation questions	D. Extent to which data enable questions to be answered nationally	E. Further research proposed?
Data relating to activities of the system	Qualifications; PSTL; Evidence-informed system; CfW framework enables flexibility; Monitoring and evaluation; Accountability systems.	**To what extent do each of the system-level activities lead directly to their associated short-term outcomes as set out in the ToC?** **To what extent do system-level activities collectively contribute to the medium-term outcomes?**	Partially	Yes (See Studies 1, 5 in Section 5)
Data relating to medium-term outcomes for learners, practitioners, parents / carers	All learners make progress	**To what extent do all learners make progress as per the principles of progression, in terms of: increasing breadth and depth of knowledge, enhanced use and application of skills, making connections within their learning and apply learning in new contexts, developing communication skills in Welsh and English?** **To what extent do learners: express satisfaction in their learning, engage in and get excited by the curriculum they experience, have their needs met, feel challenged to explore ambitious possibilities and supported to meet high expectations, recognise the role they can play in decisions about their learning?** **To what extent do learners experience teaching and learning that is wide-ranging, authentic, integrated, inclusive and equitable?** **To what extent does the CfW support increased public confidence in the education system?**	Limited	Yes (See Studies 2, 3 in Section 5)
	Four purposes are realised	**To what extent are the four purposes being realised?** **To what extent is the CfW contributing to the realisation of the four purposes?**	Limited	Yes (See Studies 2, 3 in Section 5)

A. ToC section	B. ToC item	C. Research and evaluation questions	D. Extent to which data enable questions to be answered nationally	E. Further research proposed?
Data relating to longer-term outcomes (societal).	National Well-being Goals *Cymraeg 2050* goal	**To what extent does the CfW contribute towards the achievement of the National Well-being Goals?** **To what extent does the CfW contribute towards the achievement of the *Cymraeg 2050* goal of a million Welsh speakers?**	Limited	Yes (See Studies 2, 3 in Section 5)

5. Recommended priorities for a future programme of research and evaluation

5.1 This section outlines the priorities for a future programme of research and evaluation of the curriculum and assessment reforms.

Principles for a research and evaluation programme

5.2 A programme of research and evaluation should be underpinned by a set of principles to guide research activity. The research team designed a set of principles that closely reflect and are aligned to the nature of the theory of change (ToC) set out in Section 3. They reflect the fundamental logic of the programme theory, providing a link to the programme of research and evaluation required to understand the reform process and its outcomes. The principles set out below apply to the programme as a whole and also have implications for individual evaluation studies and activities. The proposed principles state that a programme of research and evaluation should:

- examine whether the vision and requirements set out in the national Curriculum for Wales (CfW) framework are realised through the actions of schools and the wider education system
- have learners – and understanding learner progression at its heart
- focus on activities, outcomes and the relationships between them
- take a whole-system view and focus on understanding system change/improvement
- take a long view, including longitudinal research designs alongside other methodologies
- take a broad view – incorporating detailed research into novel aspects of the reform alongside more established (traditional) challenges
- inform system learning continuously – and include both planned and responsive activity

- recognise the diverse linguistic contexts across the system and reflect the commitments by the Welsh Government and partners to support learners' Welsh language skills development
- build trust in the evaluation process - among those who contribute to it and among audiences for the research
- use efficiencies and draw on existing expertise to support the evaluation process.

5.3 To illustrate the relationship between the principles above and the nature of the ToC we draw attention to the following examples.

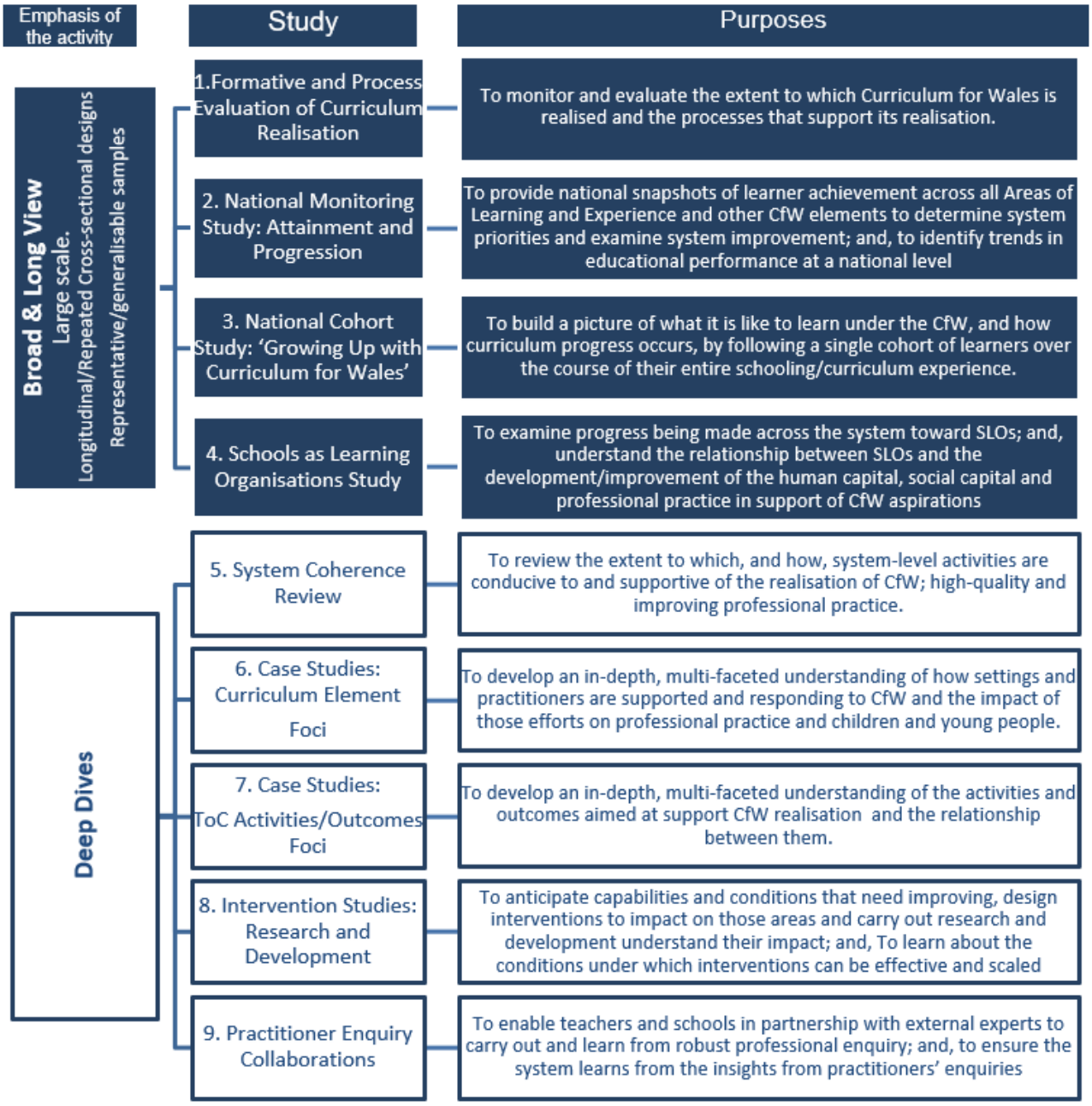
- Because the ToC takes a long view, dealing with both outcomes that would reasonably be expected to occur relatively soon, and also outcomes that will take many years, and perhaps decades to be fully realised, the proposed programme of research includes multiple studies employing a longitudinal design, or repeated cross-sectional designs.
- Because the ToC emphasises that it is not just teachers and others working in school settings that have responsibility for the Curriculum being realised, the samples in the proposed programme of research are inclusive of a broad range of stakeholders including teachers and leaders, but also including those working in ITE, in teacher and leader professional learning, at the policy level, parents/carers and, importantly, learners themselves.
- Because the ToC highlights anticipated outcomes from various activities, the proposed programme of research includes study types that lend themselves to analyses exploring the relationships between variables and how any one or more elements of the ToC might cause change in another element.

Proposed research and evaluation activity

5.4 Based on the stakeholder engagement and desk-based research carried out as part of the development of the programme theory and data mapping exercise, a recommended programme of research and evaluation activity is set out below for consideration. Nine studies are proposed, some of which emphasise a broad and long view of research into the success of the curriculum reforms, and several that

recognise the importance of in-depth investigation of more focused aspects of the work. As insights from the proposed studies are revealed, the programme of research activities should be reviewed and will evolve in response. Collectively, the set of research activities make it possible to for the programme of research to address the principles outlined above.

Figure 5. Summary of research and evaluation programme



5.5 There is a need to ensure that, for each study that is carried out as part of the programme of research and evaluation, overarching consideration is given to specific Welsh language-related questions. This should be reflected in more detailed specifications for individual studies, ensuring that research explores the

impact of the curriculum and assessment reforms on Welsh-medium education, recognising the spectrum of types of language provision in existence across Wales.

5.6 Additionally, the design of future research and evaluation studies will need to ensure that the impact of the reforms on disadvantaged learners is prioritised and understood. This should be considered carefully as part of sampling strategies during the design phase of studies.

5.7 Below we present information on each of the nine studies set out as a summary table and accompanied by an explanatory note. In light of the scale and scope of these recommended studies, it is important that consideration is given to how they relate to, and complement, other planned and emergent research activity across the wider system. This includes research and evaluation funded directly by the Welsh Government, the research activities of middle-tier partners and other external sources of research funding. There is potential for the Welsh Government to work in partnership with higher education partners, Estyn and other agencies on some of the recommended areas of research recommended. The research team recognises the costs associated with delivering such an ambitious programme of research and recommends that a wide range of potential routes to funding or commission activity be considered. This could involve working cross-departmentally to pool research resources and identify opportunities to secure research funding from institutes and foundations across the UK and internationally.

5.8 Determining sampling approaches for the large-scale studies (particularly studies 1 to 3) is complex. A detailed design phase will be required to ensure that the sampling approaches taken are appropriate in order to answer the agreed research and evaluation questions for each study, including those that apply to particular sub-groups. The need to understand learner progression and CfW impacts in relation to a range of learner characteristics (e.g. by region, by gender, by eFSM, by language of learning) introduces further complexities: larger samples will be required to produce accurate estimates at sub-group level. A sample can only provide an estimated value (in contrast to a census approach) which raises important questions, including: How much uncertainty in findings is acceptable? How can changes in findings through sample-based methods be monitored over time? These are key questions to be examined closely as part of a design phase.

5.9 On a related point, there are several references to the potential to link data collected as part of a certain study to data collected as part of other aspects of the research

and evaluation programme. The advantages of planning for such data linking are that it can:

- lead to efficiencies, avoiding repeating data collection across multiple studies
- offer insights into the conditions and environmental factors that play a part in supporting outcomes for learners, practitioners and schools.

5.10 There are complexities and challenges involved in such data linking including how to handle personally-identifying information in ways that allow linking, but keep individuals' identities confidential.

5.11 Collectively, the nine individual studies set out below reflect the need for a programme of research and evaluation to provide 'coverage' across the entire ToC. Nonetheless, we recognise that there is the potential for the studies to be configured differently, which would have implications for approaches to sampling and study design.

5.12 The greater autonomy afforded to schools to design curricula that are responsive to the needs, interests and aspirations of their learners will generate, intentionally, a range of responses to the national Curriculum for Wales framework. It will be important for the system to understand the nature of that variability and the opportunities and challenges it presents. Several studies are particularly well-placed to investigate the design of school curricula – the case studies (studies 6 and 7) and the practitioner enquiry collaborations (study 9) in particular. The proposed approaches to these studies will allow sufficient depth of attention to context to enable insights about curriculum design in particular schools and settings. These studies will allow consideration of the factors that influence, and are influenced by, the range of approaches schools and practitioners will take.

5.13 Similarly, the picture of learners' experience of curriculum established in the national cohort study (Study 3) will touch on the design of school curricula, including its priorities from the perspective of learners.

5.14 It may also be possible for the formative and process evaluation (Study 1) to reflect on key approaches to school curriculum design, to establish a more generalisable picture of how schools are responding. The extent to which schools' curricula are simultaneously 'local' (really designed with their learners and communities) and consistent with national expectations will be an important touchstone for research and evaluation activity.

Study 1. Formative and Process Evaluation of Curriculum Realisation

Overview

Study title:	**1. National Formative and Process Evaluation of Curriculum Realisation**
Design / Approach	Longitudinal Correlational Mixed methods Large scale
Data Collection Methods	Methods suited to the range of foci/variables across the ToC including - survey - interview/focus group - social network analysis - observation - methods suitable for the involvement of child participants
Purpose	To monitor and evaluate the extent to which the CfW is realised and the processes that support its realisation.
Foci / Possible Themes	Variables and processes related to: - **Professional practice** in schools (engagement, curriculum design, professional enquiry, pedagogy, assessment, self-evaluation/continuous improvement, practitioner engagement with educational research) - **Human capital** (including well-being; commitment; dispositions; knowledge/understanding; confidence; capabilities; problem-solving capability; curriculum leadership efficacy) - **Social capital** (including networks, relational ties; social structures, collaboration; trust; collective agency) - Activities for practitioners (ITE, induction/early career support, PL, Leadership PL) – their quality and impact The impact of **system elements** aimed at supporting curriculum realisation (professional standards, evidence access/use, qualifications and accountability systems)
Sample	Random stratified sample of practitioners (teachers & leaders) + matched and/or purposive samples of learners, ITE, professional learning providers, parents and carers Large sample to ensure generalisability.
Timeframe	Fieldwork and reporting activities to take place every three years from 2023/24.
Questions	- To what extent are the aspirations of the CfW framework being realised? - What are the trends in progress toward CfW aspirations? - To what extent is the human capital, social capital, and conditions in settings supporting professional practice conducive to CfW aspirations? - To what extent is activity across the system supporting the development of human capital, social capital and conditions in settings in ways that support CfW aspirations to be realised over time? - To what extent does curriculum realisation vary for schools, practitioners and students of different types and why? - How is the work of those across the education system supporting CfW aspirations being realised?
Colloquial question	*Is the whole curriculum reform working as we want and expect?*

Rationale

5.15 The CfW reforms require a new approach to curriculum design and implementation. Understanding how effectively settings and other system partners are managing and adapting to change over time will be critical. A key defining characteristic of the CfW framework is the flexibility and autonomy given to settings to design a curriculum that reflects their context and their learners' needs. This will inevitably give rise to variations in how settings develop and realise the new curriculum in response to national guidance. It also requires the wider system to re-consider the support provided to settings and practitioners. There is a need to understand from an early stage how the process of co-constructing the curriculum is being carried out in different contexts and in different types of setting in ways that reflect the intentions and requirements set out in national guidance. In addition to gathering insights into the curriculum design processes, a formative and process evaluation[11] provides an opportunity to explore practitioners', parents'/carers' and communities' perceptions of the new curriculum arrangements and their contribution to them: e.g. do they feel empowered and motivated by the process?

5.16 Alongside the flexible aspects of the CfW, the framework sets out clear national expectations and entitlement for learners - these too should be the focus of evaluation. Research and evaluation is also necessary to capture learning about how the wider system is responding to the reforms and how those in particular roles are supporting others to play their part – the support provided by middle tier partners is of particular importance. A **Formative and Process Evaluation of Curriculum Realisation** would provide a mechanism to ensure that learning can be fed back into policy decisions and guidance, building on existing data and intelligence where appropriate (as noted in section 4 and in Annex B).

5.17 This would be a large-scale longitudinal study which could commence in 2023/24 with subsequent administrations every three years (with successive cycles of research in 2026/27, 2029/30 and 2032/33). Outcomes from each administration could inform more in-depth research on specific topics as part of case study

[11] Formative or process evaluation typically examines *how, why and under what conditions* does a policy or intervention work, or not work.

research or intervention studies, and should also inform practice in as timely way as possible.

Outline of proposed methods

5.18 The Formative and Process Evaluation of Curriculum Realisation should adopt a longitudinal, mixed methods design including both quantitative and qualitative methods. It should address a broad range of curriculum elements and include a representative sample of practitioners (teachers and leaders) as well as a sample of ITE and professional learning providers. The study could also potentially gather data from a sample of learners, parents and carers although, as noted in Section 5.9 above, linking data from different studies may offer efficiencies by avoiding repeating data collection across multiple studies.

5.19 It is proposed that this research should be undertaken every three years as part of a wider programme of research and evaluation. A longitudinal design should be adopted, with the potential for an additional cross-sectional sample in each wave of the study to gather insights about particular stakeholder groups of interest. The longitudinal design would enable the study to track the curriculum journey over time.

5.20 Data from proposed evaluation Study 1 (the Formative and Process Evaluation of Curriculum Realisation) could potentially be linked with data from other studies included in the programme of research. For example, data from proposed evaluation Study 1 could potentially be linked with learner data from the proposed evaluation Study 3 (National Cohort Study) potentially limiting the extent to which learner data would be required as part of Study 1.

5.21 Surveys should include questions structured around the five dimensions of preparation used in the *Practitioners' preparations for the roll-out of the Curriculum for Wales: final report* (Welsh Government, 2022a) to enable some comparability with this previous research.[12] The survey sample should enable sub-group analysis by type of setting, sector, language medium and region. Given the unique and forward-looking aspirations of the CfW, this study should involve the validation of measures aligned to those aspirations where existing measures are not available

[12] These were *knowledge, understanding, commitment, preparation* and *capability* and were based on an adaptation of a model used in a previous study. See 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.

(for example measures relating to curriculum aspirations for learners who are ‘ethical’ or ‘enterprising’ or ‘ambitious’).

5.22 Qualitative methods should be used as part of this study, including interviews, focus groups and observations, with purposive samples. In addition, social network analysis approaches should be used to develop insights into the social structures underpinning the reforms, and to examine if and how the relational structures essential to successful reform efforts are functioning. This is important given the role of informal social structures in facilitating (or impeding) reform efforts.

5.23 If learners are included in this study, inclusive and appropriate methods should be adopted to gather insights into their experiences of curriculum realisation.

Study 2. National Monitoring Study: Attainment and Progression

Overview

Study Title	2. National Monitoring Study: Attainment and Progression
Design / Approach	Repeated cross sectional Large scale. This study would be an extensive programme of activity that would take time to design.
Data Collection Methods	Assessment data derived from high quality assessment practices including 1:1, group/collaborative, independent, administered online and in-person and marked by trained educators.
Purpose	To provide national snapshots of learner attainment across all Areas of Learning and Experience (Areas) and other CfW elements to determine system priorities and examine system improvement rather than high stakes assessment for participating schools To identify trends in educational performance at a national level.
Foci / Possible Themes	Learners' attainment: - Four purposes - 'What matters' in all Areas - Other cross-curricular skills, cross cutting elements/themes - Welsh language - Attitudes Teachers': - context/capabilities - attitudes - practice
Sample	Two stage sampling: Stratified random sample of settings and random sample of students from each setting to form representative national sample and to enable sub-group analysis
Timeframe	Annual from 2024/25.
Questions	- To what extent are learners achieving as expected in relation to CfW aspirations? - To what extent are population sub-groups of interest achieving as expected? - Do differences in average scores at key transition points reflect expected progress toward CfW aspirations over time?
Colloquial Question	*Are our children across the country doing (increasingly) well?*

Rationale

5.24 The data mapping has identified a lack of data for assessing the extent to which *all learners make progress* at national level. The discontinuation of national teacher assessment data collections at the end of the Foundation Phase and key stages 2 and 3 as CfW rolls out, mean that previously available national data will no longer be published in relation to learner attainment pre-16. Furthermore, divergence in

setting-level approaches to assessing learner progression is likely as settings develop their own approaches to assessment in line with national guidance. This is an important part of the subsidiarity principle underlying the reforms, but does also mean that local data is not likely to be able to be aggregated at a national level to give a picture of nationwide attainment and progress.

5.25 *Raising standards across the system* is a key outcome in the ToC and a lack of national data has been identified in relation to elements of the four purposes which relate to the cross-cutting skills and themes. This suggests there is a need for a national, sample-based approach to assessing learner progression in relation to the Areas of Learning and Experience and the cross-cutting elements and themes. This would provide anonymised data at national level on learners' progress in relation to these elements of the curriculum. This would not involve standardised tests for all learners.

5.26 As well as providing data for monitoring attainment and improvements in attainment at a national level, anonymised data from this study could potentially be linked to setting-level data on a) approaches being taken to curriculum teaching, learning and assessment in schools; b) human and social capital; c) the practices of teachers; and d) learners' experiences of curriculum (Formative and Process Evaluation, Study 1 above). As noted in Section 5.9, this is not without its challenges, but could provide insights into relationships between schools and practitioners' practices, and learners' attainment. Evidence of this sort would be useful to inform improvements across the system in support of curriculum reform. However, this would be dependent on at least some schools and settings being included in the samples of both studies – the complexities of which would demand careful consideration.

5.27 This study would align with one of the recommendations made in Successful Futures (Donaldson, 2015) which noted that: "The Welsh Government should no longer gather information about children and young people's performance on a school-by-school basis but should monitor performance in key aspects of the curriculum through annual testing on a sampling basis."

5.28 Data from this study could also inform and enrich any future analysis of attainment data based on the results of new qualifications which will be taught from 2025 onwards. Data based on qualifications results will be available at national level in future and will provide a measure of changes in learner attainment at the age of 16 is over time, as well as the changes in equity in the education system (e.g.

attainment of those from disadvantaged groups, attainment by gender). Findings based on sub-group analysis from this study could be compared with sub-group analysis of national qualifications data to examine any commonalities and differences emerging.

Outline of proposed methods

5.29 The development of a National Monitoring Study (Study 2) would require an extensive design and planning phase from as soon as possible. The focus of this phase would be to develop a methodology for a regular rolling national sample of learner attainment / progression within each Area of Learning and Experience, integrating all of the other cross-curricular skills, elements and themes. This should include a consideration of holistic approaches to assessment, drawing on international best practice.

5.30 For this large-scale study, systematic planning would be required and a number of considerations would need to be agreed upon, including:

- The specific learning outcomes to be used as part of the study, drawing on the outcomes of work to develop a national approach to measuring progression and attainment.
- The approaches used (which could include one-to-one interviews, team-work, group and independent tasks, supervised and observed by trained practitioners).
- The sampling approaches taken.
- Timing of data collection and the completion time required by learners included in the study.
- The development and testing of procedures for all phases of the National Monitoring Study (Study 2) activity including training of those administering and marking assessments.
- Given the importance of learners' attainment and progression within the ToC, and the lengthy design phase that will be necessary to implement this monitoring programme, there may be merit in investigating how existing data routinely recorded by schools could be used to help provide a national picture of attainment the short term.

5.31 The study would employ a repeated cross-sectional design and include a Stratified random sample of settings and random sample of students from each setting; a sufficiently large sample to enable sub-group analysis. The study would assess each Area of Learning and Experience in rotation (for example, assessing two Areas per year). It should also integrate all other cross-curricular skills, cross cutting elements/themes and Welsh Language. The study would be entirely separate from inspection and accountability arrangements and all participating schools and settings would need to be reassured that the study would not be a mechanism for comparing standards between schools.

Study 3. National Cohort Study: 'Growing Up with the Curriculum for Wales'

Overview

Study Title	3. National Cohort Study: 'Growing Up with the Curriculum for Wales'
Design / Approach	Longitudinal Correlational Mixed methods Large scale.
Data Collection Methods	- Survey - Interviews - Appropriate and inclusive methods for children and young people.
Purpose	To build a picture of what it is like to learn under CfW, and how curriculum progress occurs, by following a single cohort of learners (and their parents/carers) over the course of their entire schooling/curriculum experience.
Foci / Possible Themes	- Learners' **experience** of curriculum (pedagogy; assessment; curriculum content; school more generally) - Learners' and parents' reports/ perceptions of learners' **progress** in relation to CfW aspirations (in particular, cross-cutting elements/themes, and the four purposes (healthy & confident, ethical & informed, enterprising & creative, ambitious & capable - Learners', and parents'/carers', accounts of the relationship between learners' experience and progress
Sample	Representative sample of learners recruited before they start school and, potentially, a sample of learners who will be in Year 7 during 2022/23. Practitioners in these schools and their parents/carers would also form part of the study.
Timeframe	Design activity to begin from 2022, with annual or biennial data collection to follow.
Questions	For learners: - How are children in Wales experiencing the curriculum at discrete points in their schooling? - How is their experience of curriculum supporting children to progress toward CfW aspirations? - How do learners understand their own progress and how does this influence their approach to their own learning? - How are progression trajectories and outcomes associated with learner and school-level variables? - What factors optimise curriculum experience and progression for learners? (e.g. teaching practices) - How has CfW contributed towards the achievement of the national well-being goals and the Cymraeg 2050 goal of a million Welsh speakers? For parents and carers - How are parents and carers enabled/supported to understand their child's progression in learning? - What role(s) do parents and carers play in supporting their child's learning?
Colloquial Question	What does the curriculum journey for learners on the 'receiving end' of CfW look like year in year out?

Rationale

5.32 This is a large-scale longitudinal study to build a picture of learners' experience of CfW over time. The reform efforts in Wales present a unique opportunity to recognise and respond to the long-term ambitions of curriculum reform. This study

is important in its recognising the cumulative impact of a vast array of experiences, activities and outcomes – it recognises that the long-term aspirations of the curriculum will evolve over time, in complex way, and as the result of an accumulation of experience. It is critical to understand how that works, and the introduction of CfW presents a unique opportunity to establish and sustain such a study. The rationale for this study is the need to collect insights over a sustained period and in a systematic way into what the shift to a purpose-driven curriculum means for learner experiences and outcomes, for teaching practice and for engagement and understanding among parents and carers. For learners this would focus on their experiences of the new curriculum and progress made towards realising the four purposes, framed by the anticipated outcomes described in the ToC.

5.33 A **National Cohort Study** (Study 3) would also enable an understanding of the changes in pedagogy and professional enquiry to support the delivery of the CfW and, importantly, the effects of these changes on teachers' professional knowledge, understanding, confidence and capabilities. Finally, this study would provide an opportunity to examine changes in parents' and carers' engagement with their child's learning their understanding of progression. The National Cohort Study (Study 3) would be a longitudinal study, based on annual (or possibly biennial) research with a cross-section of learners, practitioners and parent/carers. Data from this study could be linked anonymously to setting-level data derived from the Formative and Process Evaluation of Curriculum Realisation, outlined above.

Outline of proposed methods

5.34 The **National Cohort Study** (Study 3) will require a comprehensive design and planning phase which is likely to require considerable resource from 2022/23. This phase will involve developing an appropriate methodology to enable an examination of the research questions outlined above. This will be longitudinal research, drawing principally on survey methods with the possibility of follow-up qualitative research with sub-samples. The study should include representative samples of learners, practitioners at different levels of responsibility within schools, and parents/carers.

5.35 The **opportunity here is to create a legacy; a research activity that transcends political cycles, takes a long view, and privileges learners' entire experience of CfW as worth understanding to support curriculum improvement for generations to come.**

Study 4. National Study of Schools as Learning Organisations

Overview

Study Title	4. National Study of Schools as Learning Organisations
Design / Approach	Longitudinal, or repeated cross-sectional Mixed methods Large scale
Data Collection Methods	Survey Qualitative
Purpose	To examine progress being made across the system toward SLOs To understand the relationship between SLOs and the development/improvement of the human capital, social capital and professional practice in support of CfW aspirations
Foci / Possible Themes	- The dimensions of SLOs - The transversals of SLOs[13] - Curriculum capital - Curriculum problem-solving - Progress in realising CfW aspirations
Sample	Random stratified sample of settings (e.g. stratified by region; school type; and size)
Timeframe	2023, 2026, 2029, 2032
Questions	- To what extent are the key characteristics of Schools as Learning Organisations evident across schools in Wales over time? - How are the dimensions and transversals of Schools as Learning Organisations supporting schools in their efforts to realise CfW aspirations? - How does the SLO model ensure continuous learning opportunities for practitioners that support the vision of the CfW? - How does the SLO model support learning and collaboration among practitioners that enables effective curriculum realisation? - How is knowledge about effective curriculum realisation shared in settings through the SLO model? -
Colloquial Question	Are schools well placed as learning organisations to embrace changes demanded by CfW?

[13] See OECD (2018). *Developing Schools as Learning Organisations in Wales*.

Rationale

5.36 The ToC illustrates that the development of Schools as Learning Organisations will play an important part in creating the necessary conditions to support successful curriculum realisation. There is a need to understand how schools' use of the SLO toolkit contributes to the human capital and social capital outcomes set out in the ToC, a culture of continuous improvement and high quality and improving professional practice. As noted in section 4.18 we recognise that data will be collected through schools' self-evaluation of their use of the SLO toolkit. However a national evaluation of SLO – based on a representative sample of schools – should be carried out to provide an independent assessment of the model's implementation and effectiveness.

5.37 This should be designed as a longitudinal (or repeated cross-sectional) study to examine progress across the system toward SLOs. It is suggested that the evaluation could be conducted through three-yearly cycles in 2023, 2026, 2029 and 2032.

Outline of proposed methods

5.38 We suggested that a longitudinal or repeated cross-sectional research approach is taken, using the existing SLO toolkit to support the evaluation.

Study 5. System Coherence Review

Overview

Study Title	5. System Coherence Review
Design / Approach	Document analysis/Critical policy analysis[14]
Data Collection Methods	- Documents - Interviews
Purpose	To review the extent to which, and how, system-level activities are conducive to and supportive of the realisation of CfW; high-quality and improving professional practice.
Foci / Possible Themes	- ITE; professional standards; professional learning (including for teachers and leaders); qualifications; accountability systems; research; etc
Sample	Official documents relating to all system activities/elements of the ToC Stakeholders responsible for design/writing/communication of the documents
Timeframe	Phase 1: 2022/23 Phase 2: in 2026/27
Questions	- To what extent and how are system-level activities conducive to and supportive of high-quality and improving professional practice, and the realisation of CfW aspirations? - To what extent are is there common understanding of the roles and responsibilities of different parts of the system in supporting curriculum change? - How do partners within the system collaborate to support curriculum change? - How effectively and strategically is the system working to increase confidence and capabilities (among practitioners and partners) to realise curriculum aspirations?
Colloquial Question	Is everything we're doing coherent with CfW aspirations?

Rationale

5.39 The ToC illustrates a number of system-level activities and components that are critical to the effective delivery of the CfW reforms. These include professional learning (including for leadership); the professional standards for teaching, leadership and assisting teaching; qualifications; accountability and improvement systems; and monitoring and evaluation activity. At setting level, the Formative and Process Evaluation of Curriculum Realisation will gather evidence from practitioners and leaders in relation how they interact with the wider system. However, at national level a more strategic examination of system coherence will be required that is more focused on the functions, actions and views of stakeholders.

[14] A form of policy study where the focus is upon understanding the political and social context in which a policy operates, which has the potential to impact its successful implementation.

5.40 The timing of this study is important, and it is proposed that it be taken forward in two phases:

- Phase 1 would be an early study of system coherence that could inform system improvements that support curriculum realisation efforts. This should be a focus of activity during 2022/23.
- Phase 2 would examine how the wider systems has adapted to the reforms, some 3-4 years into their implementation. This would enable an understanding of the alignment and interaction between agencies providing guidance and support relating to the curriculum, the examinations framework, and accountability arrangements. This second phase could be completed from 2026/27 to draw on experiences of new GCSE qualifications, which will be taught from September 2025.

Outline of proposed methods

5.41 These studies would be delivered through a combination of desk-based research and qualitative interviews with representatives of stakeholder organisations working in senior strategic, managerial and operational roles.

Study 6. Case study research: Curriculum elements foci

Overview

Study Title	6. Case Studies: Curriculum Elements Foci
Design / Approach	In-depth qualitative case study
Data Collection Methods	Interviews Observations Focus Groups Documents
Purpose	To develop an in-depth, multi-faceted understanding of how settings and practitioners are supported and responding to CfW and the impact of those efforts on professional practice and children and young people. They could potentially build on the findings of other studies (particularly the Formative and Process Evaluation, Study 1), exploring aspects of realisation in a focused way, providing recommendations on effective practice and support needs relating to specific curriculum elements.
Foci / Possible Themes	Pre-determined - curriculum elements: - Areas of Learning and Experience (or specific related priorities within particular AoLEs) - Mandatory cross-curricular skills: literacy (or more specific focus from the framework, e.g. 'collaborative talk' or 'disciplinary vocabulary'; numeracy (or more specific focus from the framework, e.g. 'logical reasoning' or 'calculation') - cross-cutting themes: E.g. relationships and sexuality education; human rights; diversity; careers and work-related experiences; local, national and international contexts Responsive: Themes identified based on findings of the Formative and Process Evaluation of Curriculum Realisation (Study 1) and through insights from other sources (for example PLPL, Estyn, and other studies).
Sample	Purposive sampling of settings, learners, practitioners, senior leaders, supporting stakeholders (to be determined at the design phase).
Timeframe	From 2024 onwards.
Questions	- Proposed by those leading the work.
Colloquial Question	How do people make sense of and respond to CfW? How do the words in the CfW guidance documents come to life in practice?

Rationale

5.42 Studies 6, 7, 8, 9 involve research-practice partnerships;[15] as such, they should be designed in ways that recognise partnerships as an important approach to knowledge generation and the improvement of education. Research-practice partnerships value insights into the processes, practices, and policies that improve

[15] Research practice partnerships are collaborative, long-term relationships between researchers and practitioners, designed to improve problems of practice in education.

education for learners, educators, families, communities, and institutions where learning and teaching happen.

5.43 It is proposed that further in-depth **case study research on curriculum elements** is included within the research and evaluation programme to examine how well settings as well as providers of professional learning and ITE are supporting curriculum aspirations. This could include:

- Themes focused on Areas of Learning and Experience or specific related priorities within particular Areas
- Themes focused on mandatory cross-curricular skills: literacy (or more specific focus from the framework, e.g. 'collaborative talk' or 'disciplinary vocabulary'; numeracy (or more specific focus from the framework, e.g. 'logical reasoning' or 'calculation')
- Themes focused on cross-cutting themes: E.g. relationships and sexuality education; human rights; diversity; careers and work-related experiences; local, national and international contexts.

Outline of proposed methods

5.44 A qualitative case study approach is proposed for this aspect of the programme, with a purposive sampling approach to enable a focus on settings and aspects of interest.

5.45 The case study research would be undertaken in a number of waves, with the first following the first phase of the Formative and Process Evaluation of Curriculum Realisation (2024 onwards).

Study 7. Case study research: ToC activities/Outcomes foci

Overview

Study Title	7. Case Studies: ToC Activities/Outcomes Foci
Design / Approach	In-depth qualitative case study
Data Collection Methods	Interviews Observations Focus Groups Documents
Purpose	To develop an in-depth, multi-faceted understanding of the activities and outcomes aimed at support CfW realisation and the relationship between them.
Foci / Possible Themes	Pre-determined: selected ToC activities and outcomes Responsive: Themes identified based on findings of the Formative and Process Evaluation of Curriculum Realisation (Study 1). Themes might include, for example: - The pedagogical principles in practice. - Approaches to assessment for learner progression. - Professional learning in practice. - ITE Curricula and CfW. - Professional standards in practice, and CfW. - Practitioner enquiry collaboration.
Sample	Purposive sampling of settings, learners, practitioners, senior leaders, supporting stakeholders (to be determined at the design phase).
Timeframe	From 2024 onwards.
Questions	- To be determined at design phase.
Colloquial Question	*Are the things we thought would support CfW to be realised working in the ways we expected?*

Rationale

5.46 As well as case studies relating to the Areas of Learning and Experience, cross-cutting skills and themes (see Study 4), case study research will also be required into specific ToC activities and outcomes which would potentially emerge from the Formative and Process Evaluation of Curriculum Realisation (see Study 1). In-depth qualitative research should also be undertaken to explore these issues.

5.47 Like study 6, these case studies should involve research-practice partnerships.

High-level research questions

5.48 The focus of case study research will be determined by outcomes of the Formative and Process Evaluation of Curriculum Realisation (Study 1), with examples set out in the table above.

Outline of proposed methods

5.49 A qualitative case study approach is proposed for this aspect of the programme, with a purposive sampling approach to enable a focus on settings and aspects of interest.

5.50 The case study research would be undertaken in a number of waves, with the first following the first phase of the Formative and Process Evaluation of Curriculum Realisation (2024 onwards).

Study 8. Intervention studies: Research and Development

Overview

Study Title	8. Intervention Studies: Research and Development
Design / Approach	Research and development Range of design possibilities: - pre-post - experimental - randomised control trial - comparison group - quasi-experimental - single-case experimental - mixed methods - qualitative or mixed/methods case study
Data Collection Methods	Wide range as appropriate for the interventions of focus, including, for example: - Mixed methods - Survey - Social Network Data - Interviews - Observations - Shadowing - Focus Groups
Purpose	To provide high quality interventions, using a research and development approach, to build capabilities and improve conditions that are known to need improving. To learn about the conditions under which interventions can be effective and scaled.

Foci / Possible Themes	- Professional learning activity
	- Other interventions with foci determined annually based on emerging practice and findings of the Formative and Process Evaluation of Curriculum Realisation, e.g.:
	  ○ Problem solving in Leadership of curriculum change.
	  ○ Building strong networks for curriculum improvement.
	  ○ Partnership approaches to supporting curriculum delivery.
	  ○ Rigorous practitioner enquiry for CfW.
	  ○ Curriculum teaching capabilities - AOLE focused.
	  ○ High expectations teaching.

Sample	Purposive samples of learners, practitioners, senior leaders, stakeholders
Timeframe	Series of studies to be determined annually
Questions	- What is the quality of current approaches to [__X__]? - How does the quality of [__X__] improve following an intervention? - What explains the improvement in [__X__] following intervention?
Colloquial Question	*Are our initiatives aimed at improving practice working, and what can we learn from them?*

Rationale

5.51 The ToC for realisation of CfW aspirations has a learning and improvement orientation; as such it calls for research and evaluation activities that are not limited to only describing current practice, but rather activities that contribute to improvements in curriculum realisation. There is an important place in the programme for high quality, high impact intervention studies that take a research and development approach.

5.52 These studies will provide not only depth in understandings about current conditions and practice but, importantly, also in-depth understandings about how those conditions and practices can be improved.

5.53 Like study 6, these case studies should involve Research, practice partnerships

5.54 Intervention studies are also important as part of the research and evaluation programme since they address the principle of taking a whole system view — research and evaluation puts in scope not only the work of practitioners in educational settings, but also the work of those supporting them in broader system roles, including those providing professional learning.

5.55 Research and development studies can focus on interventions introduced at different levels within the system. They can involve a range of designs, including: cross-sectional pre- post- comparison of intervention group; comparison of intervention and non-intervention groups; pre-post comparison of intervention group and comparison group; quasi-random and randomised control trial.

5.56 The principle relating to continuous learning and the inclusion of both planned and responsive activity has an important role to play here. Some interventions can, on the basis of what is already known about needs in the system, be planned and initiated in early stages. In addition, both the samples and foci of future interventions studies should be responsive to learning from other research and evaluation activity as possibilities and priorities are decided.

Study 9. Practitioner enquiry collaborations

Overview

Study Title	9. Practitioner Enquiry Collaborations
Design / Approach	Practitioner enquiry. Synthesis of enquiry findings
Data Collection Methods	Wide range as determined in practitioners' professional enquiries. Professional enquiry documentation and interviews.
Purpose	Practitioner enquiry: To enable teachers and schools in collaboration with external experts (including researchers and academics) to carry out and learn from robust professional enquiry: - examine new educational ideas and developments in their own situations. - involve a range of stakeholders in collaborations to identify and seek to overcome problems of practice through professional enquiry - engage with data on student attainment, learning and well-being to determine priorities for student learning - examine data on the impact of their practice on learners' progress, and collaborate with others to use that data to improve practice - draw on evidence (from practice and research) to determine teaching strategies most likely to help learners make progress toward CfW aspirations - establish ongoing processes to collaborate with others in such enquiry - build upon existing knowledge and develop new knowledge, skills, and experience through the critique of current practice and enquiry into new approaches Synthesis of enquiry findings: To synthesise findings from across practitioner enquiries in ways that enable the wider system to learn from those insights.
Foci / Possible Themes	- Locally determined - Spanning ToC elements, including learner outcomes
Sample	Purposive sampling (e.g.: critical case; extreme case; typical case; comparative case; matched pair; maximum variation)
Timeframe	Series of studies to be determined annually
Questions	- What do insights from practitioner enquiries signal about the strengths and needs of the system in order for CfW aspirations to be realised? - What are the implications for the system based on insights from practitioner enquiries related to CfW realisation efforts? - How do practitioners work collaboratively with others to build capability and shape their agency in ways conducive to curriculum improvement and learner progress?
Colloquial Question	What are practitioners learning from their enquiries and what does that learning mean for the system? How are practitioners sharing what they learn from their enquiries and with whom are they sharing it?

Rationale

5.57 At the heart of the ToC is recognition that learner progress is directly influenced by the extent to which professional practice is high quality and improving. Such improvements are driven by practitioners themselves as they embed robust professional enquiry into their practice. Professional enquiries demand and should develop both human and social capital. Human capital is critical to the quality of curriculum, pedagogy, assessment, and school self-evaluation. But even more critical is attention to social capital - promoting collaborative activity and deeply understanding the social conditions practitioners are operating in and that prevent or enable reform efforts to succeed. In a system that learns and improves, learning from practitioner enquiries benefits not only those who carry them out, and not even only the schools in which they take place—a strong programme of research and evaluation will both support professional enquiries and develop systems and projects that ensure the learning from practitioners across the system is harnessed and provides insight that benefits all. As with study 6, these case studies should involve research-practice partnerships where researchers and practitioners collaborate to understand and solve problems of practice.

5.58 While practitioner enquiries, by their very nature, will focus on particular priorities in local contexts, understanding the approaches taken to practitioner enquiry itself will be a priority for the system. Where formative and process evaluation activity establishes particular needs and opportunities, practitioner enquiry projects can target those and build networks of enquiry across the system. Similarly, initiatives that have external experts collaborating with practitioners in settings will help both strengthen those enquiries and build the capability and the body of knowledge for those in curriculum related professional learning, academic, and other system roles.

5.59 While the approach to and focus of practitioner enquiries will vary, the broad logic of the ToC can serve as a common framework for them. A range of ToC elements could serve as the focus for practitioner enquiry, including for example a particular group of learners, a particular CfW purpose for learners, efforts to improve collaboration of teachers across a network of schools, a particular pedagogical approach being explored by teachers, a particular leadership capability being enquired into, or more broadly the response to insights from SLOs.

5.60 Topics for professional enquiries should be informed by other studies and activities, including the National Strategy for Education and Research and Enquiry, the

outcomes of the NPEP evaluation and other priorities identified by the Pedagogy, Leadership and Professional Learning Division in the Welsh Government.

5.61 Focus of studies to be locally determined but spanning ToC elements, including learner outcomes. The sample should include both those who are experienced with and new to professional enquiry and with partnership approaches involving collaboration with external experts.

Outline of proposed methods

5.62 Purposive samples of practitioners and senior leaders. Series of studies to be determined annually.

Proposed research and evaluation timeline

A proposed timeline is set out below (by academic year) for each of the studies proposed in the sections above. As noted earlier in this report, some of these studies will require extensive design and potentially piloting phases, and this is signified below.

Table 2. Proposed research and evaluation timeline

Study	Study name	2022/23	2023/24	2024 /25	2025 /26	2026 /27	2027 /28	2028 /29	2029 /30	2030 /31	2031 /32	2032 /33	2033 /34
1	**Formative & Process Evaluation of Curriculum Realisation**	Substantial scoping and design phase											
2	**National Monitoring Study**	Substantial scoping and design phase	Substantial scoping and design phase										
3	**National Cohort Study**	Substantial scoping and design phase											
4	**National Study of SLO**												
5	**System Coherence Review**												
6	**Case Studies: CfW Elements Foci**												
7	**Case Studies: ToC Activities / Outcomes Foci**												
8	**Intervention Studies – R&D**												
9	**Practitioner Enquiry Collaborations**												

6. Annex A: Curriculum for Wales expert advisory group members

The Curriculum for Wales (CfW) expert advisory group, alongside Welsh Government officials, contributed to discussions to support this scoping study.

Professor Robin Banerjee, Head of School of Psychology University of Sussex.

Professor Graham Donaldson, Advisor on educational reform to the Minister for Education and Welsh Language

Professor Wilmad Kuiper, Professor Emeritus, Utrecht University.

Dame Alison Peacock, Chief Executive, Chartered College of Teaching.

Claire Sinnema, Associate Professor, Faculty of Education and Social Work, The University of Auckland.

Professor Richard Daugherty, Cardiff School of Social Sciences

Professor John Furlong, Emeritus Professor of Education University of Oxford and an Emeritus Fellow of Green Templeton College

Professor Mark Priestley, Professor of Education, University of Stirling

Nienke Nieveen, Associate Professor and Director Teacher education programmes, University of Twente

7. Annex B: Data mapping

7.1 This section expands on section 4, setting out in more detail the data that are available against the activities, outcomes and impacts set out in the theory of change (ToC). Each sub-section below includes an overview of data relating to sections of the ToC, namely:

- activities *for* practitioners
    - Short-term outcomes
- activities *of* practitioners
- activities of the system
    - short term outcomes: system
- medium-term outcomes for learners, practitioners, parents/carers
- longer-term outcomes (societal).

7.2 Each of these sub-sections examine the extent to which data enable high-level research questions relating to the ToC to be answered at national level, and whether additional research is proposed as part of a future evaluation. A summary of the findings is set out in Table 1 in Section 4, with references included to proposed research and evaluation studies that are described in Section 5.

Data relating to activities for practitioners

7.3 This section examines the data available relating to the activities *for* practitioners, namely:

- ITE and Induction and Early Career Support
- collaboration between schools/settings and with external partners
- professional learning for practitioners and leadership professional learning.

In the ToC, each of these activities is assumed to contribute to increased human and social capital, as well as the development of schools as learning organisations. The ToC also recognises that the quality of these activities *for* practitioners is dependent on system activities that create the strong conditions for high quality (professional standards, evidence-informed system, accountability systems, etc).

For each of these aspects of the ToC the sections that follow explore to what extent the data enable a future evaluation to test this assumption.

Initial Teacher Education and Induction and Early Career Support

7.4 Data on participation in **ITE** courses is collected annually through the higher education student record, published by the Higher Education Statistics Agency (HESA). Data on ITE student results are published annually by the Education Workforce Council (EWC), while HESA additionally publish data on the destinations of students completing Initial Teacher Training courses. This data provides a comprehensive picture of the numbers of practitioners entering the system over time, and their achievement, but does not capture the extent to which ITE contributes to developing their skills, knowledge and behaviours in relation to the Curriculum for Wales (CfW).

7.5 ITE provision is inspected by Estyn, whose pilot inspection guidance sets out how inspectors should "…evaluate how well the programme develops student teachers' understanding of the CfW and the curriculum design and development process." (Estyn, 2021b).[16] At national level, Estyn engagement reports or thematic reviews over the first few years of curriculum roll-out will provide evidence of the extent to which ITE partnerships help to develop trainees' skills, knowledge and behaviours in a way that is consistent with the realisation of CfW. At ITE partnership level, individual provider reports will capture emerging practice as well as provide a clear evaluation of the effectiveness of ITE partnership models and the ITE accreditation criteria, to develop an understanding of the extent to which they support the realisation of CfW aims.[17]

7.6 In terms of **induction**, data on the number of registered newly qualified teachers (NQTs) and the number of these NQTs who meet the required induction standards each year is published annually by EWC. EWC additionally collect data recorded by NQTs on their own professional development within the professional learning passport (PLP). Data on the numbers of NQTs and teachers who have achieved QTS who have registered for and use the PLP is provided to the Welsh

[16] *Guidance for Inspectors: What we inspect Initial Teacher Education (ITE). For pilot inspections from September 2021*.
[17] The most recent independent review of ITE in Wales was published in 2013 (A Review of Initial Teacher Training in Wales; Tabberer, 2013) and therefore pre-dates the reform process.

Government, but is not routinely published.[18] Furthermore, this data would not enable an assessment of the relationship between induction activity and the assumed outcomes of induction activity set out in the ToC.

7.7 **The available data on ITE, Induction and Early Career Support will provide a partial evidence base for answering the evaluation questions.**

- To what extent does ITE, Induction and Early Career Support enable NQTs to:
  - believe that they are, from the beginning, a significant part of the curriculum reform effort and that they can contribute fully to the mission to build a world class education system in Wales?
  - have the knowledge, skills and dispositions to take their part in realising CfW?
  - meet the induction level descriptors for teaching within the professional standards?

This suggests that the CfW research and evaluation programme should include dedicated research relating to whether, and to what extent, ITE and Induction and Early Career Support contribute to the short-term outcomes set out in the ToC.

Collaboration between schools/settings and with external partners

7.8 Data on settings' participation in collaboration activity through national and regional networks is collected, though not routinely published, by the Welsh Government and the regional education consortia.[19] Data on the percentage of schools or settings reporting that they were 'working collaboratively to support the design of the new curriculum' was also published in the *Practitioners' preparations for the roll-out of the Curriculum for Wales: final report* (Welsh Government, 2022a). This type of data can provide an indication of the number of networks established, amount of activity taking place and/or the percentage of settings who participate in collaboration through national and regional networks. However, data on participation in network

[18] Analysis of PLP data is included in the report *Evaluation of the professional standards for teaching, leadership and assisting teaching: year 1* (Welsh Government, 2021e), though there are some limitations to the data that is available on use of the PLP among more experienced practitioners who have completed their induction.
[19] See for example the National Network for Curriculum Implementation - Hwb (gov.wales).

activity does not provide evidence of the extent to which this collaboration activity contributes to increased human and improved social capital as set out in the ToC.

7.9 Estyn's guidance for inspecting maintained schools and PRUs notes that "…inspectors should consider how well the school or PRU: collaborates with other schools, initial teacher education providers and providers of professional learning to share and to develop professional practice".[20] At a national level, Estyn engagement reports, thematic reviews and Her Majesty's Chief Inspector of Education and Training in Wales' (HMCI) annual report over the first few years of curriculum roll-out will provide evidence of the quality of collaborative activity. These sources will provide valuable insights into curriculum implementation, however additional research is likely to be required to examine the relationship between collaboration and wider CfW outcomes presented in the ToC.

7.10 **The available data on collaboration between schools/settings and with external partners will provide a partial evidence base for answering the following evaluation questions**.

- To what extent does collaboration between schools/settings and with external partners support:
  - understanding of progress, challenges and responses to challenges at system level?
  - co-construction of approaches to overcoming challenges?
  - establishment networks and development of relationships?
  - implementation being driven at all levels?

This suggests that the CfW research and evaluation programme should include dedicated research relating to whether, and to what extent, collaboration activity contributes towards the short-term outcomes set out in the ToC.

Professional Learning for practitioners and leadership professional learning

7.11 Limited data on practitioners' **participation in professional learning** and leadership training is published at national level. The National Education Workforce Survey (EWC, 2021; EWC, 2017) has collected data on the number of hours of

[20] Guidance for Inspectors. What we inspect Maintained schools and PRUs – for inspections from 2022

professional learning undertaken over the last 12 months, the types of professional learning undertaken and the main barriers to professional learning.[21] Regional education consortia gather data on participation on professional learning courses they deliver, though this is not routinely published.

7.12 Some data on practitioners' perceptions of the short-term outcomes (human and social capital) for practitioners linked to professional learning in the ToC have been collected via recent practitioner surveys. The National Education Workforce Survey (EWC, 2021) reported on the percentage of practitioners who perceive that they have the knowledge/skills to deliver the new curriculum, and the percentage who agree that they have had the training and support they need from their school. Similarly, data on the percentage of settings reporting that 'teachers in their school have engaged in professional enquiry to support preparations for the new curriculum' was published in the *Practitioners' preparations for the roll-out of the Curriculum for Wales: final report* (Welsh Government, 2022a).

7.13 In terms of the quality of professional learning for practitioners, Estyn guidance for inspecting maintained schools and PRUs notes that inspectors "…should consider whether professional learning to improve teaching and develop the Curriculum for Wales has had a positive impact in developing classroom provision that meets learners' needs." (Estyn, 2021a). The evidence from individual school and PRU inspections will provide an annual national evaluation of the impact of professional learning in schools. These evaluations and Estyn's thematic inspection reviews provide the evidence for HMCI's annual report. Regional education consortia have published independent evaluations of their own professional learning provision. Furthermore, in 2022 Estyn carried out a thematic review of support provided to schools by regional consortia and local authorities for in relation to the CfW.[22] These sources will provide valuable insights into curriculum implementation, however additional research is likely to be required to examine the relationship between professional learning (including for leadership) and wider CfW outcomes presented in the ToC.

7.14 **The available data on professional learning for practitioners will only provide a partial evidence base for answering the evaluation questions.**

[21] National Education Workforce Survey (ewc.wales)
[22] See Estyn (2022) *The Curriculum for Wales - How are regional consortia and local authorities supporting schools?*

- To what extent does Professional Learning for practitioners and leadership professional learning support:
    - increased capacity for practitioners to learn continuously and respond flexibly in ways that support improvements in curriculum, pedagogy, and assessment?
    - cultural shift conducive to professional learning?
    - professional learning driven by practitioners who frame professional growth in the context of the four purposes of CfW?

This suggests that the CfW research and evaluation programme should include dedicated research relating to whether, and to what extent, professional learning contributes towards the short-term outcomes set out in the ToC.

Data relating to short term outcomes

7.15 Evidence from other contexts would suggest that the *activities for practitioners* set out above are likely to be related to the *short-term outcomes* set out in the ToC. Although that relationship is largely untested yet in a Welsh context, the ToC directly links many of the short-term outcomes for practitioners referred to in the sections above (Section 4.3 - 4.14) to the individual *activities for practitioners* (e.g. ITE). However, the ToC also links the *activities for practitioners* cumulatively to a series of *short-term outcomes* for practitioners, settings and the system as a whole, namely improvements in **human and social capital**, as well as the **development of schools as learning organisations**. This section examines the data that is available relating to these short-term outcomes.

7.16 A number of sources of data provide some evidence in relation to the development of practitioners' **human capital.**

- The National Education Workforce Survey (EWC, 2021) has previously collected data relating to practitioner **well-being**, though this has been conducted on an ad hoc basis.
- Data relating to practitioner **recruitment and retention** is regularly gathered by the Welsh Government through the School Workforce Annual Census

(SWAC) since 2021,[23] while tracking analysis has previously been undertaken by EWC as part of the Annual Education Workforce Statistics for Wales.

- The *Practitioners' preparations for the roll-out of the Curriculum for Wales* survey report (Welsh Government, 2022a) provided a snapshot of data on practitioners':
  - **commitment and learning dispositions toward CfW and curriculum change**
  - **knowledge of curriculum changes and understanding of what those changes demand and how to respond**
  - **confidence to try new practices**
  - **capabilities to practice in ways that realise curriculum intentions/aspirations.**
- The biennial Schools Health Research Network (SHRN) - School Environment Questionnaire has also asked secondary practitioners about their **Capabilities to practice in ways that realise curriculum intentions/aspirations.**
- In terms of capacity and **capability to practice through the medium of Welsh,** local authorities collect data on the Welsh language capabilities of their workforce through their WESPs.

No national-level data has been identified on levels of **job satisfaction** and **ownership** in the profession as well as **problem-solving capability** and **curriculum leadership efficacy**. The available data therefore provides a partial picture of practitioners' **human capital**.

7.17 No data sources have been identified at national level which examine the development of practitioners and settings' **social capital.** Furthermore, no sources relating to practitioners' and schools' social capital have been identified at local level which would enable a national picture to be developed. This suggests that a

[23] Historically, practitioner recruitment and retention data has been gathered via the Pupil Level Annual School Census (PLASC), but the intention is to gather this data via the SWAC in future, therefore this data will no longer be collected through the PLASC.

programme of research and evaluation relating to the CfW should include an examination of this, specifically:

- relational ties within and between schools are conducive to leveraging expertise, characterised by brokering, reciprocity, low fragmentation, diversity of perspectives, resource exchange
- collaboration involving joint work toward shared curriculum realisation goals with depth, spread, reach and pace
- trust - increasing levels of trust between practitioners, providers, parents and other stakeholders within and across schools and settings
- shared understandings about, expectations for & agency in curriculum change; shared understandings about curriculum progression.

7.18 Data on the development of **schools as learning organisations** is not routinely published at national level. The national resource: evaluation and improvement is a resource to support schools with self-evaluation and improvement and aims to support the development of schools as learning organisations. The prompts within the national resource have been mapped against SLO dimensions. However, it is not compulsory for settings to use the national resource, and it is not clear to what extent data from settings' use of it will be evaluable at national level.

7.19 **The available data on short term outcomes for practitioners, settings and stakeholders will only provide a partial evidence base for answering the evaluation questions:**

- To what extent do the activities for practitioners support increased human capital?
- To what extent do the activities for practitioners support improved social capital?
- To what extent do the activities for practitioners support the development of schools as learning organisations?

7.20 This suggests that dedicated research activity will be needed to examine the extent to which the activities *for* practitioners and system-wide activities are supporting the development of human and social capital as well as the development of schools as learning organisations.

Data relating to activities *of* practitioners

7.21 This section examines the data available relating to the key activities of practitioners within settings, namely:

- inclusive engagement and the development of a well-designed curriculum
- school self-evaluation for continuous improvement
- high quality and improving professional practice, including:
  - assessment focused on individuals' and groups' progress
  - high-quality pedagogy
  - robust professional enquiry.

In the ToC, each of these activities is assumed to contribute to a series of medium-term outcomes for learners, practitioners, parents/carers and the wider community. For each of these aspects of the ToC the sections that follow explore to what extent the data enable a future evaluation to test this assumption.

Well-designed school curriculum

7.22 Estyn's guidance for inspecting maintained schools and PRUs sets out a number of aspects inspectors should consider when evaluating a setting's curriculum.[24] At a national or system level, Estyn thematic reviews and HMCI's annual report over the first few years of curriculum roll-out will provide evidence of the extent to which settings have produced a well-designed curriculum. These sources will provide valuable insights into curriculum implementation, however additional research is likely to be required to examine the relationship between a well-designed curriculum and wider CfW outcomes presented in the ToC.

7.23 Limited survey data at national level has examined the extent to which schools are developing or have developed a curriculum in line with the national framework. The *Practitioners' preparations for the roll-out of the Curriculum for Wales* survey report (Welsh Government, 2022a) examined practitioners' confidence and capability to design their own curriculum and assessment arrangements. Additionally, the

[24] Estyn (2021). Guidance for Inspectors. What we inspect Maintained schools and PRUs – for inspections from 2022

biennial SHRN School Environment Questionnaire asked secondary practitioners (in 2019/20) about how some specific aspects of the curriculum are being implemented, for example:

- which year groups are receiving Relationship and Sexuality Education within the formal curriculum and where it is taught
- actions taken by schools to prepare to deliver health and well-being education within the new curriculum.[25]

While the above provides valuable insights in relation to these aspects of the curriculum, it does not enable a systematic consideration of how well-designed a school's curriculum is and the capability of practitioners to design it.

7.24 **The available data on how well-designed a school's curriculum is will provide a partial evidence base for answering the evaluation question:**

- To what extent have settings developed a curriculum in line with the national framework?

This suggests that the CfW research and evaluation programme should include dedicated research relating to whether, and to what extent, school curricula contribute towards the medium-term outcomes set out in the ToC.

Inclusive engagement

7.25 Two national-level surveys have examined the extent to which settings have engaged inclusively with various partners as part of their curriculum development activity.

- The *Practitioners' preparations for the roll-out of the Curriculum for Wales* survey report (Welsh Government, 2022a) asked to what extent senior leaders, teaching staff, learners, governors, and parents and carers had been actively involved in designing or informing their new school curriculum.
- The *SHRN School Environment Questionnaire* (School Health Research Network, Cardiff University, 2020) asked secondary practitioners about the level of involvement of senior leaders, teachers, pastoral and support staff,

[25] See Report on the 2019/20 School Environment Questionnaire for the Welsh Network of Healthy School Schemes (Cardiff University, 2020). These questions were not included in the 2020/21 questionnaire.

students, families and the wider community in preparing to deliver the Health and Well-being Area of Learning and Experience.

7.26 **The available data on inclusive engagement will provide a partial evidence base for answering the evaluation question:**

- To what extent have settings engaged inclusively with various partners as part of their curriculum development activity?

This suggests that the CfW research and evaluation programme should include dedicated research relating to whether, and to what extent, inclusive engagement is supporting other the other activities of practitioners and contributing towards the medium-term outcomes set out in the ToC.

School self-evaluation for continuous improvement

7.27 Limited data sources have been identified that examine the extent to which settings' self-evaluation processes for continuous improvement are: aligned with improvement planning; Integrative; reflective; honest; inclusive; rigorous; non-threatening; evidence-based and data-informed.

7.28 Estyn's guidance for inspecting maintained schools and PRUs notes that when evaluating a setting's curriculum "Inspectors should evaluate how accurately leaders and managers know the school's strengths and weaknesses. They should focus on the effectiveness and impact of the school's self-evaluation and improvement processes, rather than the quality of documentation."[26] At national or system level, Estyn's thematic reviews, HMCI's annual report and engagement reports over the first few years of curriculum roll-out will provide evidence in relation to how effective settings' school self-evaluation processes for continuous improvement are. These sources will provide valuable insights into curriculum implementation, however additional research is likely to be required to examine the relationship between school self-evaluation processes and wider CfW outcomes presented in the ToC.

7.29 **The available data on the effectiveness of school self-evaluation processes for continuous improvement will provide a partial evidence base for answering the evaluation question:**

[26] Estyn (2021). Guidance for Inspectors. What we inspect Maintained schools and PRUs – for inspections from 2022

- To what extent are settings' self-evaluation processes for continuous improvement: aligned with improvement planning; integrative; reflective; honest; inclusive; rigorous; non-threatening; evidence-based and data-informed?

7.30 This suggests that dedicated research is needed to examine whether, and to what extent, school self-evaluation processes for continuous improvement support the other activities of practitioners and contribute towards the medium-term outcomes set out in the ToC. This type of research could form part of the CfW research and evaluation programme or be undertaken separately as part of wider educational research.

Assessment focused on individuals' and groups' progress

7.31 Limited data sources have been identified that examine the extent to which settings' assessment processes focused on individuals' and groups' progress are high quality, fit-for-purpose and supportive of CfW progress.

7.32 Estyn's guidance for inspecting maintained schools and PRUs notes that "Inspectors should evaluate how well teachers develop a shared understanding of progression to ensure that their assessments are valid, accurate and reliable. When evaluating teachers' use of the outcomes of their own and external assessments, inspectors should consider how well they use this information to:

- plan lessons and the next steps in pupils' learning
- inform teaching and learning, and to help pupils to understand their own strengths and areas for improvement
- assess the progress and development of individuals and specific groups, for example those pupils at risk of underachievement or those who are more able."[27]

At a national or system level, Estyn's thematic reviews, HMCI's annual report and engagement reports over the first few years of curriculum roll-out will provide evidence in relation to how effective settings' assessment arrangements are. These sources will provide valuable insights into curriculum implementation, however

[27] Estyn (2021). Guidance for Inspectors. What we inspect Maintained schools and PRUs – for inspections from 2022

additional research is likely to be required to examine the relationship between assessment processes and wider CfW outcomes presented in the ToC.

7.33 **The available data on the effectiveness of settings' assessment processes focused on individuals' and groups' progress will provide a partial evidence base for answering the evaluation question:**

- To what extent are settings' assessment processes, focused on individuals' and groups' progress, high quality, fit-for-purpose and supportive of CfW progress?

7.34 This suggests that the CfW research and evaluation programme should include dedicated research relating to whether, and to what extent, **settings' assessment processes focused on individuals' and groups' progress** contribute towards the medium-term outcomes set out in the ToC.

High quality pedagogy

7.35 Limited data sources have been identified which would enable a future evaluation to assess to what extent there is **high-quality pedagogy, including whether** professional practices at setting level are driven by the pedagogical principles. At national or system level, Estyn's thematic reviews, HMCI's annual report and engagement reports over the first few years of curriculum roll-out will provide evidence in relation to the extent to which there is **high-quality pedagogy**. These sources will provide valuable insights into curriculum implementation, however additional research is likely to be required to examine the relationship between high quality pedagogy and wider CfW outcomes presented in the ToC.

7.36 **The available data on the extent to which settings employ high quality pedagogy provides a partial evidence base for answering the evaluation question:**

- To what extent is there high-quality pedagogy, including whether professional practices at setting level are driven by the pedagogical principles?

7.37 This suggests that the CfW research and evaluation programme should include dedicated research relating to whether, and to what extent, **settings employ high quality pedagogy and how this** contributes towards the medium-term outcomes set out in the ToC.

Robust professional enquiry

7.38 In terms of **robust professional enquiry,** the Welsh Government is currently conducting an Evaluation of the National Professional Enquiry Project (NPEP), which involves collaborations between around 300 schools, regional consortia and higher education institutions (HEIs). This will provide evidence of the effectiveness of current approaches to professional enquiry, however additional research is likely to be required to examine the relationship between professional enquiry and wider CfW outcomes presented in the ToC.

7.39 **The available data on the extent to which settings conduct robust professional enquiry will provide a partial evidence base for answering the evaluation question:**

- To what extent is there robust professional enquiry that supports the realisation of CfW?

7.40 This suggests that the CfW research and evaluation programme should include dedicated research relating to whether, and to what extent, **settings conduct robust professional enquiry and how this** contributes towards the medium-term outcomes set out in the ToC.

Data relating to activities of the system

7.41 Few data sources have been identified that would provide evidence of the extent to which system-wide activities identified in the ToC would contribute towards the assumed short-term outcomes of the CfW.

7.42 Qualifications Wales is leading a national conversation – Qualified for the Future – on the future of **qualifications** and intends to deliver proposals by summer 2022 for new qualifications, which will be subject to further consultation and co-construction. It is intended that GCSE requirements will be finalised in May 2023, with detail on the nature of the wider 14-16 qualifications offer to be agreed in early 2024. The aim is for as many as possible of the new GCSEs to be available for first teaching from September 2025, with the wider suite of 14-16 qualifications ready for first teaching from September 2027. Qualifications Wales has agreed guiding principles that will shape how they decide which qualifications for 16-year-olds should be eligible for

public funding. These principles are that "publicly funded qualifications for 16-year-olds should:

- relate to, and support, the aims and purposes of the new curriculum for Wales
- be available in Welsh and English
- contribute to a coherent and inclusive offer." (Qualifications Wales, 2020).

Data on the availability of qualifications in Welsh and English (the second of the above principles) is available and will provide evidence that can be utilised as part of a future evaluation. **However, the data currently available would not provide a picture of the extent to which the other principles above are met, suggesting a need for additional research on the extent to which qualifications contribute to the assumed outcomes in the ToC.** Qualifications Wales may conduct future evaluation work on the extent to which qualification reforms meet these guiding principles.

7.43 The Year 1 report of the ongoing *Evaluation of the professional standards for teaching, leadership and assisting teaching* (Welsh Government, 2021e) found that "Limited data is available on practitioners' levels of engagement with the standards". This illustrates that there is a gap in the data available on the extent to which the **professional standards** drive everyone who engages with learners, as set out in the ToC.

7.44 The extent to which other system-wide activities contribute to the assumed short-term outcomes in the ToC are not fully captured through existing data sources. These include the extent to which:

- an **evidence-informed system** is contributing to system improvement in curriculum implementation and to education being established as an evidence-informed profession
- the **CfW framework enables flexibility in curriculum design** and subsequently contributes to practitioners co-constructing a well-designed curriculum
- **monitoring and evaluation** processes enable system-wide feedback and learning about curriculum implementation that informs recommended priorities and approaches across the system

- **accountability systems** enable curriculum implementation problems to be identified and addressed, supporting school improvement planning and contributing to increasing standards.

7.45 **The above sections illustrate that there is limited data available that would enable a future evaluation to examine the following evaluation questions:**

- To what extent do each of the system-level activities lead directly to their associated short-term outcomes as set out in the ToC?
- To what extent do system-level activities collectively contribute to the medium-term outcomes?

This suggests that a future research and evaluation programme should include dedicated activity focused on the coherence and effectiveness of these system-level activities and the extent to which they contribute to the realisation of the CfW at national level.

Data relating to medium-term outcomes for learners, practitioners, parents/carers

7.46 In addition to the medium-term outcomes set out in the 'activities *of* practitioners' section above, the ToC assumes that the activities for, and of, practitioners as well as the system-level activities, lead collectively to a number of medium-term outcomes for learners. This section provides an overview of data available relating to items under this section.

All learners make progress

7.47 Limited data is available at national level that will enable an evaluation of the extent to which *all learners make progress* as per the principles of progression, one of the key medium-term outcomes for learners in the ToC. The discontinuation of national teacher assessment data collections at Foundation Phase, key stages 2 and 3 means there will be a lack of data for monitoring learners' progress at national level. Personalised assessments taken online by learners in years 2 to 9 are limited to reading and numeracy and provide an in-Wales relative measure only, being

standardised on data from learners in Wales.[28] This means that, prior to data on qualifications taken at the age of 16, data will not be available at national level capturing the extent to which all learners are making progress across the curriculum in terms of:

- increasing breadth and depth of knowledge
- enhanced use and application of skills
- making connections within their learning and apply learning in new contexts
- developing communication skills in Welsh and English.[29]

7.48 Evidence from future PISA surveys will provide snapshots of a sample of learners' knowledge and skills at the age 15 in reading, mathematics and science. Previous PISA reports have provided evidence for learners in Wales relative to those in other countries as well as trend data comparing results to previous cohorts of 15-year-olds in Wales. In terms of *increased equity in the education system (see below)* PISA reports provide data on variations by learner characteristics including by gender, levels of disadvantage, immigrant status and those whose first language is neither English or Welsh.[30] It is important to note that PISA data is subject to sampling error and measurement error which has to be taken into account in the interpretation of results.

Attainment is improved and there is increased equity in the education system

7.49 New qualifications will be developed for learners, with the first teaching of these for 14-year-olds commencing in September 2025. This means that data based on the results of these new qualifications would not be available until after the 2026/27 academic year. This data will be an important source of evidence in evaluating whether *attainment is improved across the education system*, and whether there is *increased equity in the education system.* The analysis of secondary data based on

[28] Annual statistical releases based on the National Test data are no longer being produced following the transition to online assessment. See the most recent publications National Reading and Numeracy Test Results: 2019 (Welsh Government, 2019a) and National Reading and Numeracy Tests and entitlement to free school meals: 2019 (Welsh Government, 2019b).
[29] Local authorities are required, through their WESPs, to provide qualitative and quantitative data on learner progression in Welsh and data relating to the numbers of learners studying Welsh as a subject and subjects through the medium of Welsh.
[30] See National Foundation for Educational Research (2019). *Achievement of 15-year-old pupils in Wales PISA 2018 National report*. The 2018 findings were based on a sample of 3,165 learners in 107 schools.

future qualifications results could also support and help inform the studies outlined in Section 5, in particular Studies 1 and 2.

Other medium-term outcomes

7.50 The ToC sets out other medium-term outcomes for learners which are not currently captured in national datasets. These include the extent to which learners:

- express satisfaction in their learning
- are engaged in and excited by the curriculum they experience
- have their needs met
- feel challenged to explore ambitious possibilities and supported to meet high expectations
- recognise the role they can play in decisions about their learning.

7.51 Some evidence relating to the above, as well as evidence of the extent to which learners experience teaching and learning that is *wide-ranging, authentic, integrated, inclusive and equitable* will be captured by Estyn. Estyn's guidance for inspecting maintained schools and PRUs notes that:

> "When evaluating the provider's curriculum, inspectors should consider how well… …the provider develops their curriculum to fully reflect the nature of their context, including designing learning activities that reflect the cultural, linguistic and diverse nature of Wales and the wider world, including how the provider plans for teaching pupils about the history and experiences of Black, Asian and Minority Ethnic communities and LGBT+ people."[31]

At national or system level, Estyn's thematic reviews, HMCI's annual report and engagement reports over the first few years of curriculum roll-out will provide evidence in relation to this aspect of the ToC. These sources will provide valuable insights into curriculum implementation, however additional research is likely to be required to examine the relationship between CfW and these medium-term outcomes presented in the ToC.

7.52 In terms of capturing *increased public confidence in the education system,* the National Survey for Wales has previously gathered perceptual data from parents

[31] Estyn (2021). Guidance for Inspectors. What we inspect Maintained schools and PRUs – for inspections from 2022

which relates to some of the medium-term outcomes in the ToC. This includes parents' views on the extent to which:

- their child is happy at school
- whether their child's school makes sure child's needs are provided for
- they feel that their child's school encourages child to reach full potential.

Future iterations of the National Survey could potentially gather this type of information from a sample of parents. However, consideration would need to be given to the extent to which this type of perceptual data from parents could be anonymously linked to data from learners and settings, and whether sample sizes would be sufficiently large to do so in a robust way. Consideration could therefore be given to including dedicated research with parents within a research and evaluation programme.

7.53 **The above sections illustrate that there is limited data available that would enable a future evaluation to examine the following evaluation questions:**

- To what extent do all learners make progress as per the principles of progression, in terms of: increasing breadth and depth of knowledge? enhanced use and application of skills? making connections within their learning and apply learning in new contexts? developing communication skills in Welsh and English?
- To what extent do learners: express satisfaction in their learning? engage in and get excited by the curriculum they experience? have their needs met? feel challenged to explore ambitious possibilities and supported to meet high expectations? recognise the role they can play in decisions about their learning?
- To what extent do learners experience teaching and learning that is wide-ranging, authentic, integrated, inclusive and equitable?
- To what extent does the CfW support increased public confidence in the education system?

Four purposes are realised

7.54 National datasets provide limited data that would enable a future evaluation to assess the extent to which the four purposes are being realised. Data relating to the extent to which learners in Wales are **healthy and confident** are gathered via the School Health Research Network (SHRN) *Student Health and Well-being Survey*, in particular the extent to which learners:

- have secure values and are establishing their spiritual and ethical beliefs
- are building their mental and emotional well-being by developing confidence, resilience and empathy
- take part in physical activity
- take measured decisions about lifestyle and manage risk.

7.55 Data on the physical activity of learners is also gathered via Sport Wales' school sports survey. Additionally, perceptual data from parents relating to their child's digital well-being and online safety have previously been gathered, though not annually, via the National Survey for Wales.

7.56 Data from surveys such as the SHRN Student Health and Well-being Survey, Sport Wales school sport survey and the National Survey will provide valuable insights in relation to some aspects of the four purposes, such as the extent to which learners in Wales are **healthy and confident**. Other unpublished survey data such as the Careers Wales Career Check survey (undertaken with Year 10 learners) could potentially provide some insights into the extent to which some learners are **enterprising and creative.**[32] However, few sources have been identified which gather national level data in relation to the realisation of the purposes - **ethical and informed, enterprising and creative** and **ambitious and capable.** Furthermore, consideration would need to be given to whether, and to what extent, data gathered through surveys such as the SHRN and Sport Wales could be linked to other learner and setting level information.

[32] Careers Wales undertake a 'Career Check' survey annually which gathers a snapshot of young people's views, attitudes, support needs, confidence and aspirations in relation to their future education, employment or training goals. The purpose of the survey is to provide careers advisers with baseline information at individual level to inform targeted work with pupils during Year 10 and 11. The survey gathers data from most pupils during Year 10, although occasionally data are collected during Year 9 or 11 if, for logistical reasons, they cannot be collected during Year 10. Data from the survey are not published, are based on a convenience sample and are not collected systematically.

7.57 At setting level, data relating to the realisation of the four purposes will be gathered by Estyn, whose guidance for inspecting maintained schools and PRUs notes that notes that:

> "Inspectors should consider the extent to which pupils feel safe and secure and free from physical and verbal abuse and that they are respected and treated fairly. They should consider how well they are becoming healthy, confident individuals and understand, for example, how to make healthy choices relating to diet, physical activity and emotional well-being, including how to keep themselves safe online. Inspectors should consider how well all pupils:
>
> - use this understanding in their life at school or PRU
> - develop their physical skills and make healthy choices, for example in responding positively to opportunities to undertake a range of physical activities during lessons, at break and lunchtime and through after-school clubs and activities
> - develop as ambitious, capable learners who are ready to learn and show confidence and resilience, for example in the way they interact with adults and persevere with their work
> - develop as ethical, informed citizens, for example through their awareness of fairness, equality, sustainability and children's rights
> - develop as enterprising, creative contributors, for example in the way they explore problem solving
> - develop their understanding of the purposes of rules, rewards and sanctions in school, and how laws are formed and apply to wider society".[33]

At national or system level, Estyn's thematic reviews, HMCI's annual report and engagement reports over the first few years of curriculum roll-out will provide evidence in relation to this aspect of the ToC. These sources will provide valuable insights into the realisation of the four purposes. However additional research is likely to be required to assess the links between the realisation of the four purposes and other CfW outcomes presented in the ToC.

[33] Estyn (2021). Guidance for Inspectors. What we inspect Maintained schools and PRUs – for inspections from 2022.

7.58 **The above sections illustrate that there is limited data available that would enable a future evaluation to examine the following evaluation questions:**

- To what extent are the four purposes being realised?
- To what extent is the CfW contributing to the realisation of the four purposes?

Data relating to longer-term outcomes (societal)

7.59 The ToC assumes that the activities will collectively contribute to the achievement of longer-term outcomes at societal level. Most of these long-term outcomes are drawn from the *Curriculum for Wales implementation plan* (Welsh Government, 2021a) which noted that: 'Children and young people across Wales realising the four purposes of the curriculum will, in the long term, have deep and far-reaching impacts on Welsh society' (ibid.).

7.60 The *Curriculum for Wales implementation plan* (ibid.) mapped the 'long-term outcomes of CfW' against the seven well-being goals set out in the Well-being of Future Generations (Wales) Act 2015. These are show in Table 3 below.

Table 3. Well-being goals mapped against CfW outcomes

Well-being goal	Long-term outcomes of CfW
A prosperous Wales	More employable school and college-leavers with access to decent work.
	More engaged, capable citizens.
A resilient Wales	More sustainable behaviours, ethical responsibilities, and a better environment.
A more equal Wales	Reduced poverty and increased social mobility.
	Closing the attainment gap.
A healthier Wales	Healthier citizens conscious of their own physical and mental well-being.
A Wales of cohesive communities	Stronger, more cohesive communities, with deeper links between schools and local communities.

A Wales of vibrant culture and thriving Welsh language	Citizens with greater appreciation for their own and other cultures.
	Greater use of Welsh language
A globally responsible Wales	More self-aware citizens that make better decisions and demonstrate sustainable behaviours

Source: Curriculum for Wales implementation plan (Welsh Government, 2021a)

7.61 In addition to these the Welsh Government's *Cymraeg 2050 goal: a million Welsh speakers* was included as a long-term outcome in the ToC.[34] The UK Census will provide future data on the number of Welsh speakers,[35] and Welsh Government research has profiled the potential trajectory for the number of Welsh speakers to 2050, taking into account changes to the curriculum.[36] The monitoring of Cymraeg 2050 will therefore provide some data on the extent to which the CfW and wider education system contributes towards the achievement of the goal of a million Welsh speakers. However, it is likely that further research activity will be needed in this area to fully assess this.

7.62 Data relating to the long-term outcomes of the CfW have been mapped by the Welsh Government against the seven well-being goals. These data sources are published alongside a set of related National Wellbeing Indicators set by the Welsh Government, with annual reports assessing progress towards achieving the 7 well-being goals. These annual reports and data will provide valuable evidence of progress against the well-being goals at national level, and by extension will help inform a future evaluation of the CfW. However, these data will not enable an assessment of the extent to which curriculum reform has contributed to any progress made against the indicators.

7.63 Ongoing longitudinal studies may assist in providing more evidence of the links between educational and longer-term societal outcomes. For example, the Longitudinal education outcomes study enables educational data to be linked with some data on the economic outcomes of learners (e.g. whether they are in

[34] In addition to the overarching aim of a million Welsh speakers, the Cymraeg 2050 strategy sets out a series of aims and measurable 'transformational changes' which relate to expanding: Welsh-medium early years provision; learners in Welsh-medium education; learners able to speak Welsh; and the number of practitioners who can teach in Welsh.
[35] Surveys such as the Annual Population Survey will provide trend estimates in between censuses although these data will be subject to sampling error and not be as reliable as the UK Census.
[36] See *Technical report: Projection and trajectory for the number of Welsh speakers aged three and over, 2011 to 2050* (Welsh Government, 2018).

employment; sector of employment; DWP, PAYE and Universal Credit data). Additionally, Welsh Government has a matched education dataset which enables data from a number of sources (the PLASC, Educated otherwise than at school data collection, Welsh Examinations Database, post-16 education collection and HESA data) to be linked for analysis. However, there is a lack of longitudinal data enabling educational experiences and outcomes, and particularly the realisation of the four purposes, to be linked with a wider range of socio-economic outcomes. This suggests that further research activity will be required to enable an assessment of the extent to which the CfW contributed to the achievement of the long-term outcomes set out in the ToC.

7.64 **The above sections illustrate that there is limited data available that would enable a future evaluation to examine the following evaluation questions:**

- To what extent does the CfW contribute towards the achievement of the National Well-being Goals?
- To what extent does the CfW contribute towards the achievement of the Cymraeg 2050 goal of a million Welsh speakers?

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