

CURRICULUM FOR EXCELLENCE REVIEW: A RESPONSE FROM THE ROYAL SOCIETY OF EDINBURGH EDUCATION COMMITTEE TO THE OECD

Executive Summary

It is important to distinguish between Curriculum for Excellence (CfE) as envisioned and CfE as implemented. While the former was met with general acceptance in Scotland, the latter has been impeded by a number of issues that are discussed in this advice paper.

Curriculum implementation has not been underpinned by a clear curriculum philosophy. This demonstrates the fundamental importance of identifying what sorts of knowledge should constitute CfE so that learners can navigate an increasingly complex world.

Although CfE contains many strong and innovative features like interdisciplinary learning, these have not always been afforded the focus they deserve.

CfE guidance is vast but much of it has been reactive and superficial, which has made it difficult for teachers and schools to make sense of its expectations and full use of its opportunities.

Many of CfE's problems are clustered at secondary school level. These include stagnation in the early years of secondary education coupled with a steep learning curve in the transition to the senior phase, a reduction in subject choice at S4, and a heightened incidence of multi-course teaching.

The influence of CfE on primary practice is uncertain. Further research is needed to determine the success of different curricular policies at the primary level.

Scotland's recent expansion of its early years entitlement has widened the scope across which the curriculum might be considered. However, it remains unclear whether 2-18 curriculum thinking is taking place.

There exists a crucial need to build the available evidence base against which the functioning of the system can be assessed. Only then can improvements be effectively targeted and best practice identified and shared.

The COVID-19 pandemic has both underscored existing problems in the Scottish education system and introduced new obstacles. However, some of its lessons can be harnessed to improve the functioning and resilience of the system.

Recommendations

We highlight the following as key recommendations for how CfE implementation can be improved:

- 1 CfE's innate strengths such as interdisciplinary learning (IDL) and the scope to support skills development should be further promoted. However, there is a pivotal need to define the role of knowledge under CfE and how it relates to both skills development and the overall learning experience. OECD is very well placed to advise on this given its substantive work in this area.
- 2 There is a need to ensure smooth progression and continuity across the whole of schooling and into tertiary education. At present, the learner journey is particularly stalled at the transition from the broad general education to the senior phase.
- 3 Clear but concise national guidance on overall curriculum design should be developed, informed by the significant education and pedagogical expertise found within Scotland's universities.
- 4 There remain significant gaps in the available evidence base across a range of performance measures. Addressing this should be a priority and would indeed serve as the starting point for a host of targeted improvement initiatives.
- 5 Some of the changes brought on by COVID-19 have proven to be positive and could be extended over the long-term. At the same time, the pandemic has dealt a blow to teaching and learning that will need to be satisfactorily remedied; otherwise, pupils run the risk of carrying the disadvantages of this year with them throughout their educational and career journeys.

Introduction

- 1 The Royal Society of Edinburgh's (RSE's) Education Committee welcomes the commissioning by the Scottish Government of this Organisation for Economic Co-operation and Development (OECD) review into Curriculum for Excellence (CfE). We are pleased that the review has been expanded from its original focus on the senior phase to cover the entirety of CfE and assessments. Curriculum and qualifications reforms have been a key area of focus for the Committee and it was pleased to have also contributed to the last review of CfE by OECD in 2015. We also appreciated the opportunity to contribute to the OECD's virtual stakeholder sessions in support of the ongoing review of Curriculum for Excellence in October 2020 and have expanded upon points made by our representative in the response below, as well as highlighting other longstanding areas of interest and concern.
- 2 Given its independent and wide-ranging expertise in education, the RSE Education Committee is well-placed to comment on the implementation of CfE in Scotland since 2010. Indeed, it is important to clarify from the outset that CfE as envisioned was met with general acceptance. It is in its delivery where many of its problems have materialised. This review presents a crucial opportunity to address these concerns and provide a way forward, also recognising that the system possesses many strengths that should be celebrated and preserved. The review is particularly vital in the wake of the seismic shifts caused by COVID-19 and the 2020 alternative certification model and more enduring concerns about a steady decline in performance, all of which have eroded public faith in the system.
- 3 This response suggests various causative factors behind the shortcomings in implementation, ranging from the absence of an overarching curriculum philosophy to a lack of clarity and support around CfE's delivery to a paucity of evaluative data. It also examines how COVID-19 has altered the original context of the review, both in positive and negative ways. From this analysis, a set of final recommendations has been derived. A list of supplementary resources authored by the Committee is presented at the end of the paper.

- 4 The Committee would be pleased to discuss this response with OECD and Scottish Government should they consider this helpful.

CfE background

- 5 CfE finds its origins in the 2002 ‘Debate on Education’ launched by the-then Scottish Executive. This exercise led to the gathering of views from a wide array of stakeholders including parents, teachers, and children on how Scottish education might be improved. Building on the feedback that was received, the Curriculum Review Group (CRG) was created in 2003, whose remit was to develop the purposes and overarching curriculum principles that would shape the design of a new curriculum. In total, four purposes (or capacities) and seven curriculum principles were identified.¹
- 6 It is important to note that CfE as envisioned in 2004 was met with general acceptance across professional and political spheres. The crux of CfE’s problems is rooted in its implementation – beginning in 2010 - and how this has diverged from what was originally conceived. In the first instance, there was no continuity in membership between CRG and later implementation groups, ensuring that implementation began as a disjointed process. It was also a protracted and underfunded one, which arguably dampened the educational community’s enthusiasm for the changes that were being brought about.
- 7 Alongside this curriculum overhaul came the introduction of a new system of qualifications and assessments. Although the existing Standard Grade system did possess weaknesses that needed addressing,² the rationale for the model which replaced it was never clearly established and was not without its own drawbacks. Indeed, in bringing in this new system, some of the inherent strengths of the Standard Grade system were lost, most notably the concept of qualifications for all. This idea was unfortunately never carried over into CfE implementation as there was a premise that teachers would enter students only for the level they would achieve, thus removing what

was seen by some as a duplication of assessment in Standard Grade with Credit/General and General/Foundation being taken by all pupils. In some cases, the replacement of Standard Grade was followed by a new set of problems such as multi-course teaching (see section on ‘Senior phase’).

- 8 The following sections discuss various aspects of CfE implementation, including ways in which it has been hampered and areas where it has succeeded.

Curriculum philosophy

- 9 One of the most significant shortcomings in CfE’s implementation has been a lack of adherence to an overarching curriculum philosophy, inevitably leading to inconsistent outcomes and unclear priorities.
- 10 In practice, CfE has often resembled a ‘skills-based’ curriculum, though this philosophical position was never explicitly stated from the outset, making it difficult to know whether this is in alignment with CfE’s original intentions. Significantly, the role of knowledge within CfE has never been well established. This is concerning as the very definition of learning is now often understood to be the sustained retention of new information. This material can of course be manipulated and applied through a myriad of different skills, but the central point remains: learning cannot take place in the absence of knowledge acquisition. While skills development is an indisputably important element of a quality education, such skills cannot exist in isolation and are only as useful as the knowledge to which they are applied. For example, interdisciplinary learning (IDL) inherently requires pupils to have a solid grasp of subject-specific knowledge before they can begin to integrate this knowledge across disciplinary boundaries. However, the balance between skills development and knowledge gain has not always been satisfactory under CfE. We note the OECD 2018 paper *The Future of Education and Skills – Education 2030*, which includes an exploration of the relationship between knowledge and skills and could serve as a useful perspective from which to consider CfE during the review.³

1 The four capacities of CfE are to build: successful learners; confident individuals; responsible citizens; and effective contributors. The nine curriculum principles are: challenge and enjoyment; depth; personalisation and choice; relevance; breadth; progression; and coherence.

2 These included a dated approach and course content as well as confusion around concurrent learning pathways, with some students pursuing Standard Grades and other Intermediate qualifications.

3 OECD (2018) *The Future of Education and Skills – Education 2030* [online] Available at: [https://www.oecd.org/education/2030/E2030%20Position%20Paper%20\(05.04.2018\).pdf](https://www.oecd.org/education/2030/E2030%20Position%20Paper%20(05.04.2018).pdf)

- 11** Another issue with implementation is that some of CfE's more unique strengths have not been realised to their full potential. For example, although IDL is one of the most distinctive and innovative features of CfE, its development in Scottish schools has been patchy. Over the past several years, the RSE has undertaken a range of work with partners to increase awareness and understanding of IDL in Scottish education. This has included a major one-day international conference on IDL, held on 30 January 2019, and, more recently, the publication of an IDL advice paper⁴ and the establishment of The IDL Network,⁵ offering useful resources and a place for teachers and practitioners to share best practice. Education Scotland's recent IDL publication, *Interdisciplinary Learning: ambitious learning for a complex world*,⁶ has been another encouraging development in the promotion of IDL, though more work remains to be done to embed it within the curriculum.
- 12** The emphasis on skills that is found in some CfE guidance and in the Experiences and Outcomes (E&Os) could have been used to foster wider transferable skills such as problem solving. Attempts were indeed made to simulate real-life problem solving in projects and assignments. However, the success of such approaches has varied. It would be useful if research were to be conducted into the reasons for this. Scotland's education system must also keep pace with the increasingly complex and dynamic challenges facing society, most recently exemplified by COVID-19. Addressing these will require literacy in ethics and other forms of philosophical thinking. Offering challenge-based or mission-oriented learning in the curriculum, from primary level upwards, will further help to create confident and capable learners and global citizens who are well-prepared to navigate this rapidly evolving landscape and offer creative solutions. There is also growing recognition of the role of curriculum in building resilience, promoting wellbeing, and providing a 'toolkit' for personal growth, elements of which CfE already recognises but which could be afforded greater prominence.

Guidance

- 13** One of the key barriers to effective CfE implementation has been a widespread and enduring lack of understanding of its core aims and expectations. From the beginning, the purpose of CfE was poorly communicated to the education community and the wider public. For example, there was no discussion of the role of schools in relation to the four capacities, leading to an assumption that all four could be fulfilled by schools on their own. This approach led to significant duplication of work across the country at differing levels of quality. Many features of CfE are open to interpretation and while this deliberate ambiguity has its benefits, in the absence of appropriate guidance, examples of poor practice have arisen and persisted.
- 14** Much of the guidance which has been made available is either inaccessibly long or too vague to be of much use. It has often been produced retrospectively in response to issues as they arrive rather than being strategically planned. The *Building the Curriculum* series, which was intended to offer high-level advice and policy on different elements of CfE, is not comprehensive enough to provide a good overview of the curriculum at large, with key elements such as IDL largely ignored. Experiences and outcomes continue to be nebulous and place an overemphasis on skills at the expense of knowledge gain. Furthermore, their value to teachers as markers of pupil progression has never been determined, nor was their relationship to subsequent guidance markers such as significant aspects of learning (SALs) and CfE Benchmarks made clear. In general, teachers have faced a massive burden of guidance, which led the OECD to recommend that core guidance be simplified and clarified in its 2015 report on improving Scottish education. However, there is little evidence to suggest this recommendation has been followed through.

⁴ Royal Society of Edinburgh (2020) Advice paper no. 20-02: Embedding interdisciplinary learning in Scottish schools [online] Available at: https://www.rse.org.uk/wp-content/uploads/2020/02/RSE_IDL_February2020.pdf

⁵ <https://idlnetwork.org/>

⁶ Education Scotland (2020) *Interdisciplinary Learning: Ambitious learning for an increasingly complex world – A thought paper* from Education Scotland, NòTosh, and a co-design team from across Scotland [online] Available at: <https://education.gov.scot/media/mkomulen/interdisciplinary-learning-thought-paper.pdf>

- 15** The former Standard Grade system illustrated some of the problems that can arise when schools are expected to set their own curriculums without having access to the appropriate guidance or national-level resources that could be modified to fit different circumstances. These included a lack of clarity around expectations, growing teacher workloads, over-assessment, postcode lotteries, and a desire to return to the status quo. Regrettably, these problems also came to mar CfE implementation due to similar confusion about where the national framework should end and local decision-making should begin. Successful innovation requires both strategic clarity and operational discretion. In the implementation of CfE, it seems the balance was initially shifted towards the latter, with the onus of curriculum-making falling mostly on schools who were ultimately left guessing if they were correctly interpreting the available national guidance.
- 16** The preceding paragraphs point to a clear need to develop more straightforward guidance for both schools and teachers on how CfE might be interpreted on the ground while still allowing for an acceptable degree of creative variation. In particular, this includes improving the existing guidance on IDL delivery and other more innovative aspects of CfE. Specific support should be made available to increase teacher capacity in crossing subject boundaries and experimenting with more modern teaching approaches that eschew ‘teaching to the textbook.’ This would also support increased teacher autonomy and confidence.

Senior phase

Flexible senior phase

- 17** The degree to which schools choose – or are indeed able – to make use of the flexibility of the senior phase is unclear, as are its impacts on the deployment of teaching staff and on timetabling. What is recognised is that smaller and more deprived schools have less capacity to deliver on the promised flexibility of the senior phase, which undoubtedly has impacts on learner progression and on the narrowing of the attainment gap. The level of collaboration between schools and colleges, businesses, and other bodies is also largely unknown, though there is presumably less capacity for such collaboration in rural areas and in the wake of financial cutbacks which saw a decline in teachers and available resources across colleges and schools.
- 18** Developing the Young Workforce (DYW) has expanded learning and career pathways in the senior phase, making it possible for more vocational courses, including modern apprenticeships, to be provided at this level and increasing connections between schools, other education partners, and employers. It would be useful to consider to what extent schools are providing for these opportunities as well as the overall value of increasing vocational provision in, or in association with, school. There is also a need to consider whether the careers guidance that is available to senior pupils is adequate, given the increasing complexity of the senior phase and indeed of the working world. It is vital that young people are supported in deriving maximum benefits from their talents and skills and are given a clear understanding of the benefits of different learning and career pathways, rather than being directed towards destinations that may not suit them.

Curriculum in early secondary

- 19** Although the CRG expressed concerns about curriculum fragmentation in the early secondary years in 2003, comparatively little has been done to address them and indeed, their duration was even extended by an additional year (S3). As a result, the early secondary years continue to be the least purposeful and most stagnant portion of the curriculum, with many curricular patterns followed but with little thought given as to how they articulate with other elements of the system. Further, the relative performance of these different approaches has never been properly evaluated, with SQA results serving as the de facto measure of success.

- 20** Delaying the start of study towards qualifications meant that S3 was added to the generally unsatisfactory Broad General Education part of secondary in those schools following official guidance. The early secondary years retained greater purpose in those schools continuing with a 2+2+2 pattern of organisation⁷ or similar.
- 21** There is scope to consider how the early secondary years could be better utilised, particularly as a tool for managing the transition between BGE and the more demanding later senior years. There is a need to ensure the curriculum unfolds in a logical way, with smooth transitions between different stages and a stable rate of progression. Two field visits and analyses undertaken by SQA appeared to confirm a lack of pace in BGE and the desire by some to move the learning associated with National courses down to lower years.^{8,9}

S4

- 22** The S4 level is the stage at which the main problems of CfE implementation become most evident.
- 23** The impetus for the Scottish Parliament Education and Skills Committee inquiry which precipitated the commissioning of this review was an observed reduction in subject choice at the S4 level. Specifically, there has been a tendency towards pupils taking six or seven subjects at S4 rather than the eight that was common in Standard Grade. This would appear to contradict one of CfE's seven core principles, which is curriculum breadth across both primary and secondary.
- 24** This has largely been an unintended consequence of the move towards beginning national qualifications in S4 and the associated requirement of 160 hours of study per course, effectively squeezing additional subjects out of the timetable. Another issue was that the qualifications assumed candidates for National 5 would have attained CfE curriculum level 4 in that area, when in reality, the majority of students were entered at this level in S4, which left them facing a steep learning curve. From a resource perspective, there has also been a decrease in available specialist subject and support teachers, making it more difficult to deliver a wider range of course offerings. Languages, creative and performing arts, and music in particular have experienced a steep decline in entries, calling their long-term viability into question. This is particularly concerning as research continues to reveal the significant contribution these subjects make to overall childhood development. Falling entries also increases the likelihood that multi-course teaching will be deployed.
- 25** While subject choice may have increased in absolute terms, this has not proven to be true at the level of the individual. Further, Scottish Government's insistence that a flexible three-year senior phase allows for multiple opportunities to pick up a particular subject is irrelevant to S4 leavers and ignores the insistence on 'passes in one sitting' criteria used for entry to certain university courses.
- 26** The impact of reduced subject choice is most keenly felt by those learners who leave school at S4 with fewer qualifications than might previously have been the case. This conflicts with the Scottish Government's aspiration to close the attainment gap. Recent research has uncovered a clear and worrying relationship between the reduction in the number of subject choices made by S4 pupils and the level of deprivation of the school's catchment area, with the reduction in subject choice being most pronounced in schools in areas of higher deprivation.¹⁰ In contrast, more affluent areas (e.g. East Renfrewshire Council) have tended to retain a higher number of course offerings, as have independent schools.

⁷ Before CfE, the curriculum was seen as falling into three, two-year blocks, or '2+2+2': S1+S2 (orientation), S3+S4 (Standard Grade), and S5+S6 (upper school – Higher, etc.). *Building the Curriculum 3* introduced the idea of phases, which follow a 3+3 pattern of organisation: S1+S2+S3 (the latter part of Broad General Education) and S4+S5+S6 (senior phase).

⁸ SQA (2016) Executive summary of initial SQA evaluation of new National Courses [online] Available at: https://www.sqa.org.uk/sqa/files_ccc/Executive_Summary_of_SQA_initial_evaluation_of_new_National_Courses.pdf

⁹ SQA (2017) National Course design and assessment – SQA fieldwork visits Year 2 (2016-17): Engagement and focus group discussions with centres delivering new National Qualifications [online] Available at: https://www.sqa.org.uk/sqa/files_ccc/SQAFinalFieldworkReport_2016-17.pdf

¹⁰ Dr. Marina Shapira oral evidence to the Scottish Parliament's Education and Skills Committee, 19 September 2018 [online] Available at: <http://www.parliament.scot/parliamentarybusiness/report.aspx?r=11680&mode=pdf>

- 27** Reduced course choice at S4 can constrain learners' S5/6 options since it will be more difficult to progress to Higher level in S5 or S6 without the pre-requisite learning having taken place at National 5 level. Fewer course options at S4 also reduces the learner's room for manoeuvring if they do not succeed in one or more of their chosen subjects. This is not only important for those learners who plan to leave at the end of their compulsory schooling, but also for those who intend to progress to further study in their chosen subjects at S5/6.
- 28** Multi-course teaching – also known as multi-level teaching – is believed to have increased in prevalence since the introduction of CfE, though supporting data remains limited. This refers to teaching more than one National Qualification specialist subject course in the same timeslot in the same classroom. It has become particularly common in the N4/N5 combination. The previous Standard Grade system had an inherent element of overlap built into it, facilitating the teaching of coursework at varying levels of complexity within the same timeslot. In contrast, levels under CfE are different enough that simultaneous delivery becomes much more challenging. The rise in multi-course teaching is now an established concern among teachers and parents who cite its detrimental impacts on teacher workloads and the quality of instruction. In the case of wider 'gaps' in course pairings (e.g. having National 4/5 students learning alongside Higher and Advanced Higher students), there is the question of the social and academic implications of having younger students learning in the same classroom as more mature ones; these effects could be both positive and negative. We highlight the longstanding work of the Learned Societies' Group in raising awareness about multi-course teaching¹¹ and of the Royal Society of Chemistry in amassing data on its prevalence and impacts on high school chemistry, which might be regarded as a useful illustrative case study.¹²

Assessments

- 29** The topic of assessments is a complex one, as this past summer's experience with the 2020 alternative assessment model brought to the fore. There is likely a case to be made for reducing the amount of assessment that currently takes place across the board as well as considering the form these assessments take, though the questions of fairness and objectivity remain important caveats. While there is certainly much to be gained from designing assessments that favour skills like creativity and critical thinking over rote memorisation, there is a danger that less standardised forms of assessments – such as take-home projects – could inadvertently place more deprived students at a further disadvantage. The fact of the matter is that these types of assessments readily lend themselves to parental interventions that parents in more deprived areas may not be in a position to provide. Further, teachers must be provided with the adequate training to administer and grade any new forms of assessment, perhaps as part of career-long professional learning (CLPL) activities. For example, the 2020 alternative assessment model highlighted the value of teachers being given greater support in making professional judgements of learner performance.

Primary

- 30** It is not clear how much CfE has influenced or altered primary practice. The introduction of the experiences and outcomes led to a process of 'auditing' the existing curriculum to see how far it aligned with what was proposed, the result of which was a massive input of staff time leading to minimal impact on pupil experience.
- 31** There remains a need to evaluate curricular policies such as 1+2 (languages)¹³ and primary STEM approaches. More fundamentally, there exists no credible means of measuring pupil progress through the primary years (this issue is explored in greater detail in the 'Need for data and evidence' section).

¹¹ <https://www.rse.org.uk/policy/standing-committees/learned-societies-group/>

¹² The Learned Societies' Group response to the CfE review includes specific figures from this survey. Additionally, more information can be obtained by contacting the Royal Society of Chemistry directly at educationpolicy@rsc.org.

¹³ This refers to pupils learning their mother tongue (1) plus two additional languages (+2). Scottish Government (2017) 1+2 Languages: a continuing policy [factsheet] [online]. Available at: <https://www.gov.scot/publications/1-2-languages-continuing-policy/>

32 There is a growing body of research which suggests that enrolling children in formal schooling too early does not reflect prevailing patterns of childhood development and so should be delayed until age seven.¹⁴ In its place, children would learn through self-led and group-led activity and play with trained adult support. Scotland is one of just a handful of European countries which begin formal schooling at age four or five, whereas the majority do not require formal school until age six or seven. It will be interesting to see how this debate develops over the coming years and whether Scotland chooses to emulate these international examples.

Early years

- 33** While the Early Level of CfE includes ages three to five, we are not certain to what extent the review will consider these stages.
- 33** Scotland has seen a major expansion of early years provision. The motivation for this has changed in recent years, with addressing disadvantage now seen as the most important outcome whereas ensuring adequate access to the labour market among working mothers has been the main driver in the past. Although it is not compulsory, it has seen a very high level of uptake and the system now has a near-universal point of transition from one establishment to another at around age five. However, it is unclear how well this new transition is being handled. A comprehensive evaluation of early years provision is necessary, including how it has contributed to overall aims of reducing disadvantage and how it might be designed to simultaneously address multiple societal needs.
- 33** This early years expansion also clearly extends the period over which continuity and progression should be evidenced in the overall curriculum design. However, there is little sign of any 2-18 curriculum thinking taking place. Building on the success of its first education conference in January 2019 which focused on IDL, the RSE Education Committee is currently planning an international conference on early years issues in 2021 (date subject to confirmation, dependent on COVID-19 restrictions). Significantly, the conference will be preceded by a series of regional child-oriented events led by key RSE partners. The events will look to gather children's views on and experiences with the currently early years system, which will then be used to inform conference deliberations and recommendations.

Management and governance

- 36** CfE was originally seen as a way of empowering teachers by affording them greater independence to exercise professional judgment. However, this empowerment was not always coupled with the guidance and professional development required for teachers to take full advantage of it. Furthermore, the extent of local authority direction, support, and oversight has varied greatly.
- 37** For example, as a result of curriculum and qualification reforms, teachers were suddenly faced with an expanded set of professional expectations but received little support to help them adapt to these changes. Alongside their usual duties, teachers now had to act as course developer and official assessor of student performance. The latter in particular led to significant discomfort among teachers who felt unprepared to judge student competency against these new standards. Inevitably, this led to increased teacher workloads and growing frustration with the system.
- 38** Partly in response to OECD's recommendation to strengthen the 'middle' in its 2015 report, Regional Improvement Collaboratives (RICs) were formed. Professor Walter Humes at the University of Stirling has analysed this and other governance changes in Scottish education and whether they have led to a decentralisation of power in practice. A recent paper refers to the RICs as a potentially promising development, but one that is still in need of 'genuinely independent evaluation, as distinct from self-reporting.'¹⁵ It would be useful to know how schools and teachers regard new support mechanisms such as RICs and the extent to which engagement has taken place. In general, regional hubs and expertise-pooling is surely a good thing in order to avoid duplication of effort and disseminate best practice, a process which has undoubtedly been facilitated in recent months with a larger reliance on digital means.

¹⁴ On the question of delaying entry into formal schooling, we refer readers to *Play is the Way: Child development, early years and the future of Scottish education* (edited by Sue Palmer, Upstart Scotland Chair of the Board) which explores this and related early years issues: <https://postcardsfromscotland.co.uk/play-is-the-way>

¹⁵ Humes, W. (2020) *Re-shaping the Policy Landscape in Scottish Education, 2016-20: The Limitations of Structural Reform*. *Scottish Educational Review* 52(2) [online] Available at: https://www.scotedreview.org.uk/media/microsites/scottish-educational-review/documents/Humes_Re-shaping-the-policy-landscape.pdf

- 39** The responsibility that local government, RICs, Education Scotland, Scottish Government, and others have in delivering and supporting CfE must be clarified. It would be useful for this review to revisit the idea of a strengthened middle and offer practical recommendations as to how any governance reconfiguration might look or be undertaken.

Need for data and evidence

- 40** It is difficult to draw any definitive conclusions about the state of Scottish education in the absence of meaningful data. Over the past several years, the evidence base on which Scotland's educational performance can be judged has been steadily shrinking, such that Scotland now only participates in OECD's Programme for International Student Assessment (PISA) where once it took part in the Progress in International Reading Literacy Study (PIRLS) and Trends in International Mathematics and Science Study (TIMSS) as well as PISA. PISA remains a good indicator of Scotland's relative proficiency at reading, mathematics, and science within the global 15-year-old cohort. However, PISA alone cannot provide the full picture needed to determine how Scotland's education system is faring on an international scale, at various stages of schooling, and across a diverse set of markers.
- 41** This lack of international data is compounded by the fact that national-level data is unsatisfactory in what it can tell us. The Assessment of CfE Levels (ACEL) uses teacher judgement and so does not provide objective evidence of student performance. Nevertheless, recent figures – which show that a quarter of primary pupils are still not reaching expected literacy levels and a fifth are falling short of expected numeracy levels¹⁶ – should be regarded with concern. While teacher judgment is crucial in identifying cases where learners may be struggling in the classroom, it cannot then be aggregated into an objective measure of national academic performance.
- 42** The Scottish Survey of Literacy and Numeracy (SSLN) was replaced by Scottish National Standardised Assessments (SNSA). However,
- the two are very different and the SNSA cannot be regarded as a directly comparable replacement. Whereas the SNSAs provide individual-level data on learners' attainment that can be tracked over time, the SSLN was a sample survey of both learners and teachers which gathered a wider range of information than that generated by the SSNA, and which was able to provide a system-level analysis of attainment. It bears mentioning that the SSLN showed a continuous decline in performance in both literacy and numeracy at all stages of measurement.
- 43** The SSLN also collected a wider range of information related to attainment, including information about a learner's home background. This provided scope to investigate the effects of poverty on educational attainment, for example. The Scottish Index of Multiple Deprivation (SIMD) reveals pockets of disadvantage but does not capture individual cases, meaning that some students invariably slip through the statistical cracks.
- 44** The review presents an opportunity to call for improvements in the quantity and quality of educational data and, in turn, the ability to independently evaluate the performance of the school system. There is a clear need for an agreed and authoritative set of performance indicators which are regularly compiled and span key skills and markers of knowledge. These should be designed in collaboration with interested and expert bodies such as higher education institutions and the RSE.
- 45** Additionally, CfE provides great allowances for flexibility in approach, and it is important that these different approaches are subject to independent evaluation so their relative efficacy and impact can be determined. This includes an analysis of how initiatives aimed at closing the attainment gap are working in different areas.
- 46** However, with better data comes the risk of yet more bureaucratic burdens being placed on schools and teachers, as well as the possibility that such data is misused as an accountability measure. Checks must be put in place to prevent this.

¹⁶ Scottish Government (2019) Achievement of Curriculum for Excellence (CfE) Levels 2018/2019 [online] Available at: <https://www.gov.scot/publications/achievement-curriculum-excellence-cfe-levels-2018-19/pages/2/>

COVID-19

- 47** Over the period between late March 2020 and the end of the school session, a massive – if involuntary – educational experiment took place. Virtually overnight, school premises were vacated and education was largely moved from the classroom to the home computer screen.
- 48** Scottish Government and its agencies were slow to react to these changing circumstances. In some cases, official interventions proved to be counterproductive by prohibiting the use of online teaching with video connections.
- 49** Schools and teachers across Scotland worked tirelessly to provide students with a meaningful learning experience and their efforts should be commended. However, research suggests that few children and young people were able to access enough support, with many falling behind in their studies to varying degrees.¹⁷ Problems included schools failing to provide sufficient work, feedback, and tuition; lack of engagement by pupils; parental inability to keep children on task and offer additional support; lack of hardware, connectivity, and suitable working spaces in some homes; and a range of other difficulties. These impacts were not uniformly felt across the system, with the independent sector responding better than the state sector.
- 50** We are still in the early stages of understanding how the pandemic impacted Scottish education and it is important that a proper evaluation is carried out. However, a number of tentative conclusions can be offered:
- The importance of face-to-face teaching has been reinforced. However, technology has also enabled more sophisticated support than would have previously been possible. The level of existing technological expertise in schools has been an important determinant of successful adaptation to remote learning, though many schools have learned to be resourceful. Investment in training and resources for staff to deliver digital learning (e.g. access to laptops and smartboards, training in specific platforms, etc.) and ensuring compatibility across different platforms would likely have lasting benefits.
 - The system must be prepared to address potential mental health impacts on both staff and students stemming from both the initial 2020 lockdown and any enduring changes to educational delivery that emphasise remote learning over face-to-face contact, which could give rise to feelings of loneliness and isolation.
 - The importance of parental engagement and support in promoting pupils' success has come into greater prominence than ever before.
 - Some families have major difficulties in accessing technology-based support. Access to the necessary equipment is an obvious problem but there are others such as a lack of quiet workspaces and poor internet connectivity. Some schools were able to distribute equipment to those in need; government efforts appear to have been less successful.
 - Most teachers spent little time in traditional teaching but used their time constructively in other ways. Schools now have an experience of using their human resource in a different manner, a pattern which could be sustained in the future.
 - Almost all learners have fallen behind, with the impact being greatest on disadvantaged groups. As such, Scotland is now faced with an enormous remediation task. It will be challenging to devise an effective strategy to address these learning deficits, especially given the arrival of a second UK wave of cases and further lost classroom time in those areas where additional periods of self-isolation become necessary.
 - Scottish Government prioritised the reopening of schools and, importantly, keeping them open in the face of rising case numbers in certain locales. This was undoubtedly the right decision and should be positively acknowledged.

¹⁷ Green, F. (2020) Schoolwork in lockdown: new evidence on the epidemic of educational poverty (Centre for Learning and Life Chances in Knowledge Economies and Societies – Research Paper 67) [online] Available at: https://www.llakes.ac.uk/sites/default/files/LLAKES%20Working%20Paper%2067_0.pdf

- The controversy surrounding the 2020 alternative assessment model supports a shift away from a reliance on exams in gauging pupil performance in favour of greater use of other objective evidence such as projects and assignments. This would have the added benefit of promoting IDL and associated meta skill development as well as enriching BGE teaching and learning. At the same time, it will be important to manage the issue of fairness, as the projects of more affluent pupils are likely to benefit from greater parental input and social capital while the parents of less advantaged pupils may be less able to offer support.

51 It is fair to conclude that neither technological capability nor strategic thinking has yet reached a position from which it is possible to try to put in place a radically new model of schooling. At the same time, schools have come to question traditional assumptions about:

- the duration and pattern of the school day, week, and year;
- the deployment of teacher time;
- the place of parents in the educational process;
- the value and balance of blended learning, in the sense of class teaching supported by an effective strategy of small-group and individual tuition; and
- the place of technologically-enabled learning as part of the normal learning experience.

52 Above all, it is important that the nature of the recent experiment, with its successes and failures, is carefully documented and researched. The education systems that emerge strong in the long-term are likely to be those which are absorbing the lessons that are currently unfolding. Indeed, returning to the pre-COVID-19 status quo would represent a missed opportunity to improve the system and increase its resilience in the face of both small-scale and more dramatic disruptions.

Additional Information

For further information about the RSE Education Committee or to arrange a meeting, please contact its Secretariat, Daria Tuhtar (dtuhtar@theRSE.org.uk).

Responses are published on the RSE website (<https://www.rse.org.uk/>)

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Other relevant publications by the RSE Education Committee include:

Interdisciplinary Learning in Schools (February 2020):

<https://www.rse.org.uk/advice-papers/interdisciplinary-learning-in-schools/>

Subject Choices at School (March 2019):

<https://www.rse.org.uk/advice-papers/subject-choices-at-school/>

Standardised Assessments in Scottish Education (January 2019):

<https://www.rse.org.uk/advice-papers/standardised-assessments/>

Attainment and Achievement of School-Aged Children Experiencing Poverty (April 2018):

<https://www.rse.org.uk/advice-papers/attainment-and-achievement-of-school-aged-children-experiencing-poverty/>

Empowering Schools (February 2018): <https://www.rse.org.uk/advice-papers/empowering-schools/>

Measuring the Attainment Gap (November 2017):

<https://www.rse.org.uk/advice-papers/measuring-the-attainment-gap/>

Development of a New Statement on Curriculum for Excellence (August 2016):

<https://www.rse.org.uk/advice-papers/development-of-a-new-statement-on-curriculum-for-excellence/>

Scottish Government Delivery Plan for Excellence and Equity in Scottish Education (August 2016):

<https://www.rse.org.uk/advice-papers/scottish-government-delivery-plan-for-excellence-and-equity-in-scottish-education/>

Reflection on OECD Education Report (February 2016):

<https://www.rse.org.uk/advice-papers/reflection-on-oecd-education-report/>

Evaluation of Curriculum for Excellence (December 2014):

<https://www.rse.org.uk/advice-papers/evaluation-of-curriculum-for-excellence/>

Implementation of Curriculum for Excellence and the New National Qualifications (September 2014):

<https://www.rse.org.uk/advice-papers/implementation-of-curriculum-for-excellence-and-the-new-national-qualifications/>