

Membership of the Commission on School Reform is as follows:

- **Keir Bloomer (Chair)**: Education Consultant and former Director of Education
- **John Barnett:** University Court Member, retired finance professional and former Parent Council Chairman.
- **Helen Chambers:** Co-founder of Inspiring Scotland
- **Jamie Cooke:** Head of RSA Scotland
- Carole Ford: Former Head teacher
- **Jim Goodall:** Former Head of Education and Community Services at Clackmannanshire Council and current Lib Dem councillor at East Dunbartonshire Council
- Anna Hazel-Dunn: Headteacher Royal High Primary
- Frank Lennon: Former Head of Dunblane High School
- Cllr Paul McLennan: SNP Councillor in East Lothian
- Ross Martin: Economic Agitator with experience in a variety of roles in education-including school teacher, voluntary tutor, chair of local education authority, member of college board & university court, Chair of a charity, and, most importantly, a parent and former student.
- **Lindsay Paterson:** Professor of education policy in the School of Social and Political Science at Edinburgh University
- Lesley Sutherland: Board member, the Centre for Scottish Public Policy

Please note that all members of the commission participate in an individual capacity and that the views of the commission do not represent the views of any other organisation to which the individual members belong.

This paper is submitted by the Commission on School Reform, an educational policy group set up by the think tanks Reform Scotland and the Centre for Scottish Public Policy.

Introduction

The Commission welcomes the decision by the Scottish Government to review the broad general education phase of Curriculum for Excellence (CfE) and the subsequent extension of the remit of the review to cover CfE as a whole and issues of assessment (in the light of the difficulties surrounding the 2020 diet of examinations). Given the widespread public concern over several years about the implementation of CfE and the performance of Scottish school education more generally and government dismissal of most of these concerns, such a review can fulfil an important role in giving public reassurance.

However, this will only be achieved if the review is conducted in an open and transparent manner and if priority is given to listening to varied viewpoints. In this respect the Commission has two concerns. OECD has already been involved in reviewing CfE on two occasions and has expressed its general support for the approach that has been taken in Scotland. The Commission hopes that OECD will undertake its new review objectively and will not take as its starting point opinions that it has expressed on previous occasions. Secondly, it is unfortunate that the current pandemic prevents OECD from visiting schools and holding meetings with key stakeholders and others with important concerns. In these circumstances, it is very unfortunate that OECD has not sought written comments from interested individuals and organisations. virtual meetings with several parties at a time cannot be regarded as an adequate substitute.

Background to Curriculum for Excellence

Curriculum for Excellence can trace its origins back to the National Debate on education which took place during 2002. Strictly speaking there

were two debates; one initiated by the Education Committee of the newly-established Scottish Parliament and the other by the Scottish Executive (now known as the Scottish Government). The first was focused on the purposes of education while the second was more wide-ranging.

In response to the debates, the executive set up a Curriculum Review Group (CRG) with a remit, not to design a curriculum, but to identify the purposes of school education and the principles should underpin the subsequent development of a curriculum. In the event, the CRG's report, entitled Curriculum for Excellence and published in November 2004, set out four purposes, known as 'capacities', and seven curriculum design principles. It asserted that the aim of education was to develop young people as effective contributors, successful learners, confident individuals and responsible citizens. The curriculum should demonstrate challenge and progression, enjoyment, breadth, depth, personalisation and choice, coherence and It will be obvious that both the purposes and the principles were expressed at a very high level of generality and that the success of the programme would depend on the way they were interpreted and put into effect.

The report met with widespread approval, both by the teaching profession and the public. However, little effort was made either to engage with the profession in discussion about how the high level statements might be translated into action or to explain to the wider public what kind of changes in classroom practice or in qualifications could be expected as a result of the implementation programme.

Furthermore, there was minimal continuity of membership between the original CRG and subsequent implementation groups. Experience suggests that the latter did not fully understand what was intended by the former. Implementation thus proceeded on the basis of inadequate understanding.

In the event little significant action took place in the period 2004-08. Thereafter, the focus was on changes in the secondary school examination system, which were largely implemented in 2010/11. Indeed, in the minds of many commentators and members of the public, CfE has come to mean little more than changes in examinations and qualifications. Any proper understanding of CfE, therefore, has to distinguish between the programme as conceived in 2004 and as implemented, largely after 2010 although some schools had made changes to their curriculum and to classroom practice before that date.

Flawed implementation

Since the implementation phase began in 2010/11, little attention has been paid to ensuring coherence between the philosophy of CfE and its implementation. Indeed the implementation has largely been treated as a technical exercise to be undertaken by schools. The key feature was the publication of an ever-growing mass of guidance to teachers — running to some 20,000 pages according to Education Scotland in evidence to the Education and Skills Committee. It is important to comment on a number of items.

The Building the Curriculum series of lengthy papers was seen as providing the essential high level guidance. It was presumably intended to be comprehensive. However, it included a paper on the contribution of subjects with which every teacher was already familiar but nothing on interdisciplinary learning (IDL) which was intended to be a key feature of the new curriculum but of which few teachers had significant experience. One of the papers, Building the Curriculum 3, introduced a number of new concepts such as levels and entitlements which were not part of the 2004 conception. These have proved to be ill-considered, difficult to implement and unhelpful to the idea of continuity and progression of learning throughout schooling.

The *Experiences and Outcomes* (Es and Os) were intended to cover the full curriculum, indicating very briefly the kind of learning experience that pupils should have and the knowledge and/or skill they should acquire but not, to any great extent,

the curricular content to be conveyed. The Es and Os were set out in a standard rather childish formula, purporting to be in the voice of the learner, in which curriculum content was often ignored. CfE was thus, from the outset, very weak on the place of knowledge in education. In the primary school in particular, the Es and Os lead to a time-consuming process of curriculum auditing, often designed to rationalise the status quo.

In sum, the last OECD review concluded, the guidance amounted to 20,000 pages, much of it of poor quality and questionable value. OECD's report. recommended 2015 therefore, simplification and a reasserting of the core narrative of CfE. In response, Education Scotland produced a set of online slides, unobjectionable in themselves but additional to the material already available. No process of genuine simplification and withdrawal of unnecessary or ineffective guidance has taken place. Some new elements such as Significant Aspects of Learning and Benchmarks have been added leaving the relative status of these and the Es and Os in question.

New exams were introduced at an early stage of the implementation phase. It was claimed that these were better aligned with the new curriculum. However, no clear rationale was offered. Over time it has become clear that some valuable features of Standard Grade have been lost with no obvious compensating gain. In particular the removal of the overlaps between levels at Standard Grade has led to an increase in the problem of multi-level (or multi-course) teaching where groups studying for very different exams are taught in the same classroom.

During the period of the introduction of the new exams, there was a failure to control teacher workload which resulted in excessive burdens for many teachers. This demonstrated an inability of the system to learn from its own experience as the workload problems replicated those that accompanied the introduction of Standard Grade some twenty years earlier. The limited resources of teacher time and goodwill were squandered.

Narrowing the curriculum in S4

The stage of schooling where problems arising from flawed implementation became evident earliest and most clearly is S4. Even so, those failings have been largely denied by government.

There has been a substantial decline in the number of examination subjects that the individual pupil can study across the country although not in all schools. This has arisen as a result of the guidance given in Building the Curriculum 3 that preparation for the new examinations should not begin until S4, taken together with the requirement that the new examinations should entail the same number of hours of study as their predecessors. In other words, the 160 hours per course required to be fitted within one year rather than two. This can only be achieved by reducing the number of courses; a point which was immediately apparent to school timetablers and should surely have been evident from the outset to those involved in the writing of the curriculum guidance. The consequences were foreseen by many headteachers but their concerns appear to have been ignored. The result has been a fall in the number of subjects studied from eight, which was largely standard across Scotland before CfE, to seven or six. A small number of schools initially reduced the number to five but this pattern has now largely disappeared.

This restriction of choice entails an obvious adverse effect on those pupils seeking passes in several sciences or modern languages. More generally, it reduces the number of qualifications pupils hold at the point of leaving S4 and can thus restrict subject choice in S5. The curriculum has been narrowed, although that was never part of the philosophy of CfE: in most schools it is not possible to continue study in all curriculum areas in S4. There is scope for argument about whether Scottish pupils are now better or worse educated by the end of S4; it cannot be denied that they are, on average, less well-qualified.

The most negative effects have been felt by those pupils who leave school at the end of S4, holding poorer qualifications than would probably have been the case before the introduction of the new

exams. The drop in the number of pupils taking courses at N4 level suggests that the lack of credibility of this non-examinable course is depriving many young people of a qualification suited to their current level of attainment. Furthermore, they do not have the benefit of a further chance in S5 to improve their These pupils are, of course, qualifications. overwhelmingly those from less advantaged circumstances. In other words, the decline in choice in S4 disproportionately affects the disadvantaged and the attainment gap, about which the Scottish Government is rightly concerned, widens. Pupils emerging from S4 poorly qualified are also seriously disadvantaged as their chances of improving their qualifications in S5 have been much reduced by the removal of the stepping-stones which previously existed between mid-secondary courses and seniorsecondary courses.

This effect is compounded by the fact that many schools in affluent areas have been able to maintain the tradition pattern of eight subjects. For example, independent schools and all schools in East Renfrewshire, academically the most successful area in the country, offer eight subjects. (This includes the two schools in East Renfrew which do not serve privileged areas.) The restriction of the curriculum has been most evident in schools in deprived areas and in smaller schools.

There has been a significant impact on certain subjects. Modern languages was already in decline but the downward trend has been accelerated. The position of English and mathematics as, in effect, compulsory subjects, has not been affected. However, a large number of optional subjects have experienced a decline in uptake. There has thus been a distortion of the curriculum as a whole. There may, indeed, now be a case for stipulating a minimum extent of breadth in the S4 curriculum.

It is noteworthy that the Scottish Government has on various occasions denied that a restriction of choice has taken place, pointing to an increase in the number of courses notionally available. This is disingenuous. What matters is the number of

choices that the individual can exercise, not the universe of possibilities that cannot be accessed. Education Scotland, the government's curriculum agency, has on occasion suggested that this curriculum narrowing was foreseen deliberate. If so, it was certainly not publicised or exposed to consultation. A far more likely explanation is that it has been the unintended consequence of ill thought through guidance based on no coherent curricular rationale. It is significant that those schools which ignored the guidance to abandon the traditional 2+2+2 structure of the secondary school and continue with preparation for examinations beginning in S3 have served pupils better, at least in so far as providing a broad curriculum and a wide range of qualifications in S4 are concerned, than those which adhered to official policy.

Multi-level teaching

This practice is perhaps best described as multicourse teaching as the problem lies in the fact that teachers are being required to teach simultaneously syllabuses which are essentially separate courses rather than different levels of the same or similar courses, as would have been the case under Standard Grade.

This practice is now thought to have become more common in recent years. As often in Scottish education, there is no data which would prove or disprove this allegation. Whether the problem lies in an increase in the incidence of this form of organisation or in the fact that the separate courses have become more different and, therefore, more difficult to teach in the same classroom, or in some combination of the two, there is no doubt that it is now a source of serious concern to many teachers, parents and pupils.

The main cause lies in the loss of the overlaps in level that Standard Grade allowed. Thus, there was considerable common ground between Foundation and General levels and between General and Credit, although the extent of the overlap varied from subject to subject. In other words, the reason for the increasing problem lies in the structure of the new examinations and its

curricular implications. It is not clear that the new examinations have brought any benefits that compensate for this and other adverse consequences of their introduction.

However, there also seems to have been an increase in multi-course teaching at Higher and Advanced Higher levels. It must be assumed that the reasons here are organisational and may result from pressures on staffing.

The increase in multi-course teaching is, of course, a cause of increasing teacher workload. Indeed, dealing with two or more groups of pupils studying essentially different courses in the same room at the same time must be a source of considerable stress. However, despite the efforts of teachers, it must surely be the case that there has been a loss of quality in the service to pupils.

Flexible senior phase

The prescripts of *Building the Curriculum 3* included the separation of the secondary stages of schooling into two phases; a phase of broad, general education (BGE) which followed on seamlessly from primary education, extended until the end of S3 and precluded exam preparation, and a senior phase which allowed S4-6 to be planned as a unified but flexible experience, allowing numerous pathways to be followed. As indicated in the previous section, the impact of these decisions on the experience of S4 pupils has been very different from what was intended.

The impact of the flexible senior phase is less clear. Again, the lack of information is striking. How much use of the potential increased flexibility have schools made? What forms has this taken? Are large numbers of young people spending parts of the week in different institutions? Has there been increased collaboration with colleges or with business? Have the new arrangements compensated for the opportunities lost by the withdrawal of earlier courses such as Intermediate 1 and 2 and SCOTVEC modules? The answers to these and many other questions are not clear.

There is a need also for an evaluation of the progress that has been made with the Developing Scotland's Young Workforce programme and with vocational provision. If this has been significant, it is possible that the new senior phase is better serving a substantial group of young people not previously given much priority.

The increasing diversity and complexity of the senior phase calls for improved guidance and advice for pupils. This applies less to those studying traditional academic subjects and seeking entry to higher education. It is, however, vital that those intent on vocational routes or unclear about their way forward should receive well-informed and up-to-date advice that will allow them to maximise the use of their talents. This has not been a strength of Scottish education and does not appear to have been given sufficient attention as yet within the new arrangements.

The curriculum in early secondary

The fragmentation of the curriculum in S1 and S2 was a cause of major concern to the CRG during its discussions in 2003/04. It concluded that the early secondary years were the least satisfactory part of the whole school experience. These years were seen as the priority for reform.

However, the decision to introduce new examinations early in the implementation phase meant that the attention of secondary teachers was firmly focused for several years on work associated with exam changes. Little progress was made in relation to the early secondary years. There was also less guidance on this subject than many others. There was little thinking about what should be the shape of the curriculum at these stages. Schools were offered no curricular rationale for these years; a striking instance of the neglect of curriculum philosophy referred to elsewhere in this paper.

At the same time, the introduction of the phase of BGE meant that the early stages of secondary education now consisted of three, rather than two, years. It would be only a slight exaggeration to

say that all too often three years of slow-paced time-wasting took the place of two. Those schools which retained a 2+2+2 pattern of organisation (or something closely related to it) were able to offer more of a sense of purpose and momentum than those that followed official guidance.

There are now signs of change. Recent surveys of the curriculum in individual schools have shown an astonishing number of patterns in S1-3. However, the number of individual subjects or courses remains extremely high, especially in S1 and S2. A number around 15 would appear to be the norm but more that 20 is not uncommon. In other words, the problem of fragmentation has certainly not been solved. The disorienting impact on pupils, especially less academic pupils, remains much as at the time of the CRG.

The early years of secondary need to be seen as part of a smooth progression through education from 3 to 18+. It is impossible to reconcile that requirement with a pattern of organisation that moves from a curriculum co-ordinated by a single teacher for much of the primary years to one involving numerous teachers in early secondary and then one requiring progressively fewer thereafter. That is not to say that all fault lies on the secondary side of the transition. It does, however, imply that much more serious thought needs to be given to the overall curricular experience of the young person progressing through the school system, to the implications of continuity and progression, and to the educational philosophy that needs to underpin the experience in the early secondary years.

The Commission believes that the lack of purposeful focus on the early years of secondary schooling represents one of the greatest failings of CfE implementation.

Primary

It is unclear the extent to which the introduction of CfE has brought about significant change in primary schools. Primary schools generally embraced the idea of education being shaped around the four 'capacities' but there has been little attempt to discover what changes in practice this produced.

The publication of the Es and Os led to a widespread practice of curriculum auditing, designed to establish the extent to which existing methods and content accorded with the new guidance. In a good many cases, the effect was to entrench the status quo. The process, however, was invariably time-consuming and demanding.

Primary education has been affected by a number of other curricular policies which, although separate from CfE implementation, would be said by official sources to be compatible with it. These include 1+2 (which promotes modern language learning) and an emphasis on STEM. These policies stand in need of evaluation. They appear to lay quite unreasonable expectations on teachers without expertise or qualifications in the relevant curriculum areas.

There is growing pressure in favour of childcentred and play-based approaches in the early primary years. It is argued that formal schooling begins too early in Scotland (and elsewhere in the UK) and that an extended period including both the pre-school years and primary education up to the age of 7 or 8 should be seen as a kind of kindergarten phase. Some campaigners believe that provision should be moved out of primary schools; others that practice in early primary should resemble that pre-school in establishments. There is, once again, little information on the effectiveness of different kinds of practice. The Commission considers that there is an urgent need for research in this area.

An arguably even more important lack of data relates to performance in the primary sector as a whole. In the past, the Scottish Survey of Literacy and Numeracy (and its predecessor) provided a picture of progress in key areas of the curriculum. The survey did not rely on 'high stakes' testing and, indeed, was not intended as a measure of the achievement of individuals but of standards nationally. Tests were sat by a sample of pupils with minimal disruption of the system. Since its

abolition, objective measurement of attainment has not taken place.

At the time when the introduction of standardised assessments was being mooted, the Scottish Government was committed to testing of all primary pupils at various stages. In response to protests, particularly by teachers' unions, plans were modified. As a result, the current Scottish National Standardised Assessments combine an element of testing with teacher judgment. The objective of the tests appears to have shifted. Talk of measuring standards has vanished, being replaced by references to diagnosis of individual difficulties. Whatever the value of this diagnostic use of the tests – and teacher opinion is divided – there is now no credible way of establishing, for any area of the curriculum, whether Scottish education is progressing or slipping back. It is also clear that the same methodology cannot simultaneously serve the purposes of diagnostic assessment/support for teacher judgment and generation of performance data. SNSAs are now used primarily for the former with nothing being put in place to provide the latter. In the Commission's view this is not acceptable.

Early years

In recent years, the Scottish Government has invested heavily in the expansion of services for very young children. The Commission considers that this is admirable.

The early level of CfE includes the years 3-5. Almost all children now attend some kind of preschool provision during these years. A significant number of two-year olds are also involved. It is not clear to what extent the OECD review will look at these years. The Commission hopes that it will do so.

With near-universal uptake of early years education and childcare, entry to primary school around the age of 5 is coming to be less of an abrupt transition from the home to a school setting and more of a transition from one setting to another. It is likely that many children will find this less traumatic. It would, however, be useful

to know more about this transition and how well it is accomplished.

An even more important issue arises from the fact that education in Scotland now begins for almost all children well before the age of five. There is a need now to ensure continuity and progression over a period that starts at age 3 if not earlier. The importance of continuity has been stressed at various points in this submission

Curriculum philosophy

It is clear that the implementation of CfE has been seriously flawed. Of all of the many flaws, the neglect of curriculum philosophy has been the most serious. There is little sense among teachers or the broader public that anything of importance has been achieved.

Much of the failure can be attributed to the quality of the implementation groups, the failure to separate strategy from operational management, the quantity and quality of the guidance and a host of other practical considerations. There is also, however, an issue of whether the philosophy of the programme has been appropriate, clear and understood.

Teachers would now find it difficult to describe what CfE is, how it differed from what went before or what improvements it either was intended to bring or has, in fact, brought about. The 2004 paper was, in effect, a mission statement rather than a curriculum. The task of translating it into a curriculum was undertaken without serious understanding of the implications of the mission statement and by groups whose grasp of the original concept is open to question.

In particular, the place of knowledge in the new curriculum has never been fully worked out. It has been claimed that CfE is a skills-based curriculum and the one-time central position of the Es and Os in the implementation programme gives some credence to that idea. However, it was certainly not worked through in a consistent or thoroughgoing manner. There has been a serious loss of rigour which can be demonstrated through

the limited number of objective measures that remain in place and is manifested in declining standards.

Scotland now takes part in only one international survey of educational achievement; PISA, run by OECD. Although this is the largest and most prestigious of the surveys, it evaluates only the performance of fifteen year olds in three curricular areas; literacy, numeracy and science. It cannot, therefore, on its own be regarded as an adequate assessment of the system as a whole.

Nevertheless, the information that it has provided is deeply troubling. As the table below shows, Scotland has taken part in every survey from the beginning in 2000. On that occasion, Scotland performed comfortably above average – the average score is always around 500 – in all three curricular areas. Its performance placed it in the upper quartile of participating countries.

Since then performance has declined in all three areas and is now below average in two of the three subjects. As PISA compares mainly developed countries, this strongly suggests that Scottish school education is not internationally competitive at the highest level.

<u>Table 1</u> Scotland's performance in PISA (NB Average performance = 500)

	2000	2003	2006	2009	2012	2015	2018
Maths	533	524	506	499	498	491	489
Reading	526	516	499	500	506	493	504
Science	522	514	515	514	513	497	490

The internal evidence of performance also gives cause for significant concern. The Scottish Survey of Literacy and Numeracy measured performance in these key areas at two stages of primary schooling and in the second year of secondary education. It too showed a pattern of steady decline from year to year in all stages and in both subject areas (see tables below). As explained below, it has been discontinued by the Scottish Government and replaced by an unsatisfactory system of allegedly standardised assessments.

<u>Table 2a</u>
Performance in numeracy – percentage of learners achieving nationally expected standards

Stage	2011	2013	2015	
P4	77	69	66	
P7	72	66	66	
S2	42	42	40	

<u>Table 2b</u> Performance in literacy – percentage of learners achieving nationally expected standards

Stage	2012	2014
P4	83	78
P7	90	88
S2	84	80

A further cause of concern about performance is to be found in the comments of principal examiners working for the SQA. The following examples come from the 2019 analysis. (It is worth noting that the Higher pass rate in that year was the lowest of recent years.)

- Mathematics, all levels: performance was undermined by weak algebraic skills and weak numeracy.
- Biology, Higher: 'most candidates had difficulty providing a brief summary of the method for their experiment.' There were similar comments in Chemistry
- Geography, all levels: candidates tended to make stereotyped generalisations without evidence. (Similar comments were made about English.)
- French at Higher: problems with candidates' grasp of spelling, genders, plurals, accents, adjectival agreement [and] tenses.

These are not isolated examples.

In short, it is clear that there has been a general deterioration in standards in Scottish school education during the period when CfE has been being implemented. The causes of that decline are complex and varied but the Commission has no doubt the weaknesses in the philosophy of the CfE and weaknesses in understanding the learning process are crucially important.

The general consensus from high-quality research by psychologists on what learning is and how it happens is that it involves a change in long-term memory along with mechanisms for retrieving ideas from long-term memory. If nothing has altered in long-term memory, nothing has been This means that knowledge is learned. fundamental to learning and thus to any process of education. Not all knowledge is of equal importance. Over a long period of time systematic structures of knowledge have developed. These are disciplines which are linked to, but are not the same as, school subjects. An educated person requires to have an understanding of the main disciplines. function effectively in a complex world, people also need to be able to use knowledge and understandings from several disciplines together. Thus interdisciplinary learning has to be built on disciplinary foundations. In short, all sound learning depends on the acquisition of knowledge in a systematic way. Good-quality vocational education also needs the development of knowledge, both of the technical needs of particular trades and also of the social contexts in which they are exercised. That is one reason why a broad educational grounding is necessary for vocational education, because that provides the basis on which truly vocational knowledge can be built

It is obviously important that learners should acquire skills. Decoding print and counting are skills. So, of course, are many other more complex actions. However, skills do not exist in a vacuum but depend upon knowledge. This applies even to so-called thinking skills. It is not possible to think without thinking about something. The acquisition of many skills also requires routine learning that is not intrinsically enjoyable, despite the mantra of CfE that making

learning enjoyable ought to be a paramount aim. Examples are learning how to spell, learning multiplication tables, learning irregular verbs in a non-native language, learning how to perform well in a sport, or learning how to play a musical instrument: to acquire these kinds of skill to a level that makes them automatic is both necessary for higher-level accomplishment and also inevitably not likely to be regarded by most pupils with enthusiasm. How to address these pedagogically difficult issues is neglected by Curriculum for Excellence.

The Commission thus believes strongly in the importance of knowledge and considers that educational approaches which under-value knowledge are detrimental to the interests of learners. It believes that knowledge has been under-valued under CfE and that this is largely responsible for declining standards in Scottish education.

The importance of knowledge and of the structures of knowledge accounts for the value that has traditionally been attached to a broad liberal education. This is a strong feature of the Scottish educational tradition although currently under attack. CfE has been described as being based on constructivist philosophy, whereby pupils are expected to discover knowledge rather than acquire it. While there is an important role for discovery as a means of motivating pupils, constructivism is wholly inadequate as a principle of curriculum design. It is wasteful and ineffective to expect pupils to discover ideas that are wellestablished. Far more effective is to teach these ideas as part of interconnected bodies of coherent knowledge. The Commission, therefore, believes that all young people should benefit from such a liberal education for as long as possible. It is not, however, hostile to vocational education and accepts that special provision needs to be made for those who struggle. However, mainstream provision, as defined in the Standards in Scotland's Schools Act 2000 should seek to maintain a broad curriculum for each individual until a point where it is demonstrated not to be effective or suited to individual need.

This suggests also a need for continuity through education from very early years into further and higher education. Within the school sector, this requires serious attention to be paid to the shortcomings of the early secondary years and possibly also the years that immediately precede them.

All this indicates the need for a clear design for the educational process as a whole in which the place of knowledge is fully recognised. That design should be the substance of national educational strategy; its implementation the responsibility of empowered schools.

Need for data and evidence

Over a period of at least a decade, public debate about education has centred around whether the performance of the system is improving, stagnating or deteriorating. The existence of this debate illustrates one of the Commission's principal concerns. There will always be disagreement the interpretation about information and statistics. However, extended debate over the facts, as continues to take place in Scotland, is possible only in a system which lacks authoritative data. Scottish education is datapoor, with less information now available than was the case fifty years ago. This, in itself, has to be a cause of major concern.

Several important sources of data have been lost. Scotland used to participate in three international surveys; the Programme for International Student assessment (PISA), the Third International Survey of Mathematics and Science (TIMSS) and the Progress in International Reading Literacy Study (PIRLS). PISA measures performance only at age 15 whereas the other two surveys consider attainment at several stages covering both primary and secondary education. Scottish Government has withdrawn from two of these, leaving PISA as the only source of information comparing Scottish performance with that of other countries. The Commission believes that this must be remedied by re-joining the other two surveys and also by taking other opportunities for international benchmarking.

The government has also abolished the Scottish Survey of Literacy and Numeracy (SSLN), an authoritative sample survey of standards at three stages of schooling. No comparably authoritative source of information now exists. Assessment of Curriculum for Excellence Levels and the Scottish National Standardised Assessments (SNSAs) which the government has introduced cannot be regarded as adequate replacements, both being reliant on teacher judgment. The Commission sees considerable value in teacher estimates but does not see these as a proper foundation for objective data about the performance of the system. The value of the SNSAs is that, although teacher judgment dictates when the assessments are given to a pupil, the assessments themselves have been designed to a high standard. Thus, without any modification to their content and assessment method, the SNSAs could be used to measure the state of the system as a whole by means simply of a greater standardisation of their administration. However, doing that would interfere with the diagnostic purpose of the SNSAs. To retain that purpose, it is necessary to return to having a regular survey of attainment like the SSLN

It is important that the review should recognise the importance of the lack of good data and should make recommendations accordingly. New issues will always arise, calling for data that is not available. However, it is vital that an agreed set of basic performance information should be developed.

This requirement for improved data and information must not lead to an increased amount of bureaucratic activity, particularly at school level. The collection of data must be streamlined and, as far as possible, automatic. It is also vital that the need for better information should not contribute to the development of additional forms of accountability at school level. The Commission considers that the burden on schools of existing bureaucratic accountability systems is excessive and would wish to see it reduced. (This is quite separate from the legitimate expectation that teachers should be accountable for their own performance.)

Few of the initiatives introduced as part of the CfE programme have undergone any kind of evaluation. It is important that sufficient resources are available for this purpose. It may be that strengthening the capacity for data interpretation within government and in agencies such as SQA will be required.

Governance

CfE was originally seen as a vehicle for empowering teachers. However, much of the enormous quantity of guidance was issued as a response to lack of self-confidence in the profession. It is clear that developing an empowered profession requires careful preparation and extensive relevant development opportunities. These were not a feature of CfE implementation.

It is clear that the experience of CfE implementation has raised important questions about processes of change of the kind which the Commission highlighted in its report By Diverse Undertaking a major programme of reform requires strategic clarity, which is a national function, and operational flexibility which is better achieved at a local level. CfE has The over-production of achieved neither. guidance, much of it certainly in response to teacher demand, meant that strategic clarity was quickly lost, to the extent that few teachers could now say what CfE is or what it was designed to achieve. The welter of guidance also meant that schools were – or, at least felt - micro-managed.

The Scottish Government is now committed to improving the clarity of its objectives through devices such as the National Improvement Framework. It is also seeking to increase local decision-making by giving schools greater autonomy, particularly in relation to the curriculum, funding and staffing. In the Commission's view, this is the correct approach. It is, therefore, a matter of great regret that the government withdrew the Education Bill which would have given statutory force to its intention to empower schools and has allowed its policies

to be watered down in a succession of concessions to vested interests.

It is now appropriate to review the extent of the progress that has been made. This will need to be done on a consultative basis with careful attention being paid to the views of headteachers and senior staff. If necessary, government will require to adopt a stronger approach, perhaps resurrecting the abandoned Education Bill.

As part of that evaluation, it will be important to assess the success or otherwise of changes recently introduced, partly in response to the OECD's 2015 report. That report recommended that the 'middle' in Scottish Education should be strengthened. By the middle, the report was referring to sources of support, guidance and governance that lay between the school and the national centre, i.e. the government and its agencies.

The government's main response has been the establishment, on a voluntary basis, of Regional Improvement Collaboratives (RICs), which each bring together the resources of several local authorities in an effort to provide better support to schools. The RICs have been in existence for quite a short time and their performance has not been evaluated. It would be appropriate now to do so. In conducting such an evaluation, particular attention would need to be paid to the views of class teachers and others operating in schools.

The pandemic experience

The Commission appreciates why the Scottish Government has considered it sensible to extend the scope of the review to cover recent experience in relation to the 2020 diet of examinations. That experience has caused a number of people to wonder about the future of examinations and question whether current arrangements are appropriate. It is, therefore, entirely reasonable to seek the opinions of the review team on these matters. The Commission believes that the cancellation of the exams and subsequent decisions about the awarding of qualifications

have to be seen in the context of the education system's reaction to the pandemic more generally. It is, therefore, commenting on these matters also.

However, the Commission would not wish to see the implications of the pandemic consuming an excessive proportion of the review team's time. The original remit relates to CfE. The problems relating to it long predate the current crisis and are unlikely to be resolved by anything emerging from recent experience. For this reason, the Commission has kept its comments on recent events relatively short.

For a period slightly in excess of three months the Scottish school system, like those in many other countries, was engaged in a large-scale, if involuntary experiment; providing education largely without the use of schools. A relatively small number of children of key workers and those from disadvantaged backgrounds were given the opportunity to attend hub schools. Otherwise, learning took place at home. There was an expectation that schools would support this process and that parents and others would also assist to the extent that they could.

Schools often showed considerable enterprise in providing support by contacting pupils by a variety of means and making lessons available on one of a number of distance-learning platforms. Some were able to provide a kind of face-to-face tuition using a variety of electronic means of communication. The level of success varied widely depending on the expertise of different schools and individual teachers but also according to a number of other factors including socioeconomic circumstances. Less affluent homes sometimes lacked suitable electronic devices. Where these existed, they most commonly took the form of mobile phones with small screens and clumsy interfaces. Sometimes there was no internet access. Children in such homes often lacked suitable quiet space in which to work. Unfortunately, it was also the case that many parents in disadvantaged families were less confident about providing support to their children and were less qualified to fulfil this role. In short, it is clear that disadvantaged learners

suffered more during lockdown and it can confidently be assumed that the attainment gap has widened.

Research demonstrates that the amount of learning undertaken, even in more affluent households, was less than had been hoped. Few schools were able to provide anything like a full day of lessons. Many children appear to have found distance learning less stimulating and motivating than normal classroom interaction. On the other hand, there seem to have been some learners who found the new approach to learning liberating and who made good progress. Freedom from the constraints of the school day and the rigidly timetabled week was welcome to them. In other words, pupil experience varied widely.

At the same time, schools have been through a learning process. Many teachers have acquired new technological skills. The approaches employed have necessarily had some of the characteristics of 'blended learning'. have used their human resources in ways that bore little resemblance to the normal pattern in which by far the largest part of the teaching capacity available is used to ensure that each class has a teacher in front of it. Schools are also able to comment on the support that they have had from local authorities, RICs, government and its agencies. The general view seems to be that such support was late in coming and disappointing in It is surprising that independent its extent. schools without the resources of government and public agencies at their disposal appear to have been able to provide more direct support to pupils than most schools in the state sector.

It is important that lessons should be learned from this extraordinary experiment. Some approaches will have worked better than others. Although the experience seems to have confirmed the importance of face-to-face classroom teaching, it seems unlikely that nothing that took place during lockdown will be of value for the future.

It is, therefore, disappointing that no effort has been made nationally to gather information systematically about what actually happened and how it was perceived by pupils, parents, teachers and others. It is vital that research is conducted even at this relatively late stage. This is particularly important, given that there appears to be an interest in learning from the pandemic experience in all walks of life and in innovating where that seems appropriate.

Examinations were cancelled at a very early stage of lockdown. It now seems that there might have been merit in exploring innovative means by which they might have gone ahead. However, in the circumstances of a rapidly increasing crisis, it is easy to understand why that was not done.

It is less easy to understand why the methodology devised by the Scottish Qualifications Authority (SQA) for awarding qualifications was not exposed to public scrutiny until the day that results were issued. Had it been made known earlier, it is likely that the resulting outcry would have persuaded the minister of the need to modify the approach, thus avoiding considerable anxiety for pupils and a very public climb-down by the government. The fatal flaw in the original scheme was not that it made use of teacher estimates but that it did not involve the use of any evidence relating to the work of the individual. Grades and qualifications were awarded by the use of an algorithm based on the historic performance of the school. Equally puzzling is the government's refusal to give Mark Priestley - whose recently published review they commissioned - access to the algorithm.

These events rightly attracted considerable criticism at the time. The immediate consequence of the government's decision to abandon the intended methodology and rely entirely on teacher estimates was to increase the pass rates in N5, Higher and Advanced Higher by more than 10%; this in a year when all candidates had fewer weeks of teaching than in a normal year. Thousands of candidates were awarded qualifications and grades to which they were not entitled. This will no doubt create difficulties for many of these young people as they progress on to courses for which they may well not be suited. The credibility of the examinations has undermined. It will be controversial and difficult to restore pass rates to defensible levels. These are significant issues although there is undoubtedly an understanding that, in very exceptional circumstances and with little time in which to make decisions, a rather rough and ready approach may have been inevitable.

The same consideration does not apply to the 2021 diet. SQA and the government have had ample time to plan for the coming year. However, there are alarming signs – especially in the light of the recently announced decision to cancel next year's N5 exams - that schools feel they have not yet received adequate guidance although the session has been underway for some six weeks. It is not clear that steps are being taken to ensure that, whatever the circumstances in 2021, judgments will be based, at least partly, on real evidence about the work of the individual candidate. The Commission regards this as a nonnegotiable requirement if the awards are to have any credibility.

The task of devising an approach that is fair to all may prove very difficult. It is clear that there is likely to be a series of local lockdowns over the coming months. While the intention is to keep schools open at these times, there has already been one instance where this has been deemed not to be possible. It is, therefore, quite possible that exams will have to treat equitably pupils whose school experience during the session has been varied.

In short, it is now clear that neither the conduct of SQA examinations — now restricted to HG and AHG - in the coming year nor the assessment of N5, will be straightforward. Clear guidance needs to be available to schools as soon as possible. Moderation and assessment approaches need to be transparent, based on proper evidence and fair to pupils whose state of readiness is different through no fault of their own.

Finally, as with other areas of life, the pandemic has led to some fundamental questioning and, possibly, an appetite for radical innovation. Campaigners are seeking the abolition of examinations and far-reaching changes in the role of schools in the awarding of qualifications which

have important consequences for life opportunities.

The Commission is not wedded to the present system and is very willing to consider any proposals which may emerge on their merits. However, it would be opposed to any change which retained something like the present structure of end-of-school qualifications but sought to replace examinations entirely by the assessment of coursework or some similar approach. Examinations judge all candidates under the same circumstances. Other approaches tend to confer advantages on those who can rely on effective parental support or merely access to better resources in the home.

The Commission considers that Scotland should certainly learn from the pandemic experience but not embrace unsound ideas.

Conclusions and recommendations

The Commission considers that, although the original statement of principle set out admirable objectives for Scottish school education and met with very widespread approval both from teachers and the general public, the influence of CfE as implemented has been largely negative. It has been associated with a decline in standards which Scotland can ill afford.

At the same time, it has to be acknowledged that, even before the impact of the pandemic, the system was suffering from serious workload problems and innovation fatigue. A radical rethink would be amply justified but would almost certainly be unacceptable both to the public and the profession. What is needed, therefore, is a programme of gradual change that will remedy the shortcomings of recent years over an acceptable timescale without calling for Stakhanovite effort. This would require careful attention to be paid to workload issues in a way that has not characterised initiatives in Scottish education in recent decades. It would also have to involve long-term planning and a sustained and consistent sense of direction.

In the view of the Commission, such a programme should focus on:

- An increased emphasis on knowledge as the central concern in any learning activity,
- The development of more effective change processes, involving greater strategic clarity and increased school autonomy,
- A commitment to greater transparency based on increased research and evaluation and improved information and data.
- A radical simplification of the programme, including the withdrawal of most of the existing guidance,
- An increased focus on continuity and progression from 3 to 18 and an improvement in provision from P6 to \$2/3.
- Removal of anomalies, such as the narrowing of the curriculum and an increase in multi-level teaching, arising from existing ill-conceived guidance.

The Commission believes that the current review could result in very important improvements in Scottish education. It looks to the OECD review team to recognise the substantial problems that currently exist and frame its recommendations accordingly.