

INTERNATIONAL COUNCIL OF EDUCATION ADVISERS

**IMPROVING PEDAGOGY FOR SPECIFIC SUBJECTS, USING CLEAR EVIDENCE
TO IDENTIFY WHAT WORKS IN THE CLASSROOM**

PAPER BY SCOTTISH GOVERNMENT LEARNING DIRECTORATE

Introduction

1. Supported, innovative and informed pedagogical practice is at the heart of Curriculum for Excellence (CfE). CfE has helped to support an important mind shift in attitudes to teaching practice, providing practitioners and teachers with a broad framework which empowers them to provide a flexible curriculum for all children and young people. Streamlined clear guidance and resources provided by Education Scotland through the National Improvement Hub, and in association with the Scottish Attainment Challenge, are helping schools to identify evidence-based interventions to raise excellence and equity for all. However, we appreciate there is still more work to be done to consistently embed evidence-based effective practice across schools and fulfil our intention to see CfE as a truly school-and teacher-led curriculum.

Previous Advice from the International Council

2. In the report of their initial findings the International Council set out the following recommendations to improve pedagogy for specific subjects and the use of clear evidence to identify what works in the classroom. The Scottish Government should:

- Establish and fund a network of proven and well-trained teaching professionals who are highly accredited for their pedagogy but also have a strong knowledge of the community/health and wellbeing aspects of CfE;
- Identify a systematic, sequenced and selective plan for literacy and numeracy, including a research based approach to improving learning and development, that ensures they can both achieve targeted academic goals while being responsive to the unique needs of each learner; and
- Consider expanding the role of universities to work more closely with schools in the spirit of collaborative inquiry.

The remainder of this paper will focus on the most recent evidence of improvement and the action we taking to address the recommendations of the Council. It will also highlight key areas where further advice and guidance is sought from Council members.

Recent inspection evidence

An analysis of evidence from school inspections from September 2016 to June 2017 has provided the following evidence in relation to pedagogy in Scotland's schools. The most common key strength identified through inspection relates to children's confidence, motivation and engagement in learning. This reflects the significant improvements to learning experiences that Inspectors have observed as Curriculum for Excellence continues to be embedded. It also reinforces the findings of the OECD review (2015) that learners in Scotland are resilient and have good relationships with teachers. Overall, inspection evidence indicates that further improvement is required in assessment in particular.

Key strengths and aspects for improvement in primary schools in the last year have been as follows.

- A range of approaches to learning and teaching are being planned and children are motivated and engaged in their learning.
- Primary school teachers are becoming more confident in making professional judgements on whether children have achieved a CfE level, in particular in literacy and numeracy.
- In most primary schools, assessment is not linked closely enough to planned learning and teaching. As a result, assessment does not always provide clear enough information on children's strengths and next steps in learning, or prompt teachers sufficiently to intervene when individuals or groups are under-achieving.
- Teachers need to work more together in ongoing moderation activities to ensure shared expectations for the standards to be achieved.

Key strengths and aspects for improvement in secondary schools in the last year have been as follows.

- Teachers are planning a wider range of learning opportunities within and beyond the classroom. This is increasing young people's motivation and engagement and broadening their skills for learning, life and work.
- Overall, systems for tracking and monitoring young people's progress and intervening to address under-performance are much stronger in the senior phase of secondary schools than from S1 to S3.
- Teachers are making increasing use of Benchmarks to help monitor the progress of young people from S1 to S3.
- Teachers need to continue to develop their confidence in making professional judgements in young people's achievement of Curriculum for Excellence levels in S1 to S3.
- Teachers need to continue to develop a shared understanding of standards within the third and fourth levels of Curriculum for Excellence.

The evidence also demonstrates that there has been a significant reduction in subject-specific and sector-specific pedagogical support at local authority level in recent years. The support for schools across Scotland is too variable. Children's progress in key areas such as literacy and numeracy is improving but is still variable. Unless this variability is addressed we will not achieve our national ambition of excellence and equity for all learners.

In terms of improving assessment, the OECD told us in 2015 that Scotland had the opportunity to 'lead the world' in developing an integrated approach to assessment and evaluation. Since then we have implemented the main recommendations to support improvements to assessment:

- Benchmarks have been co-designed with teachers through national networks to clarify standards for each level in each curriculum area. These are not checklists and do not tell teachers *how* to teach. They provide clear statements which help teachers to make confident, reliable judgments about children's progress and next steps in learning.
- A national programme of moderation of teacher professional judgment and support has been implemented. Professional learning has been provided for teachers in 31 local authorities and a new moderation and assessment cycle has been developed. This is enabling high quality professional dialogue within and across schools about children's progress and next steps in learning. The national moderation cycle can be found at appendix A.

Key messages to schools include the need to plan assessment as part of learning and teaching rather than as a 'bolt on'. Teachers' professional judgement on children's progress and the achievement of curriculum levels in literacy and numeracy should be based on a range of assessment evidence and moderated with colleagues. Most of this evidence is normal classwork, discussion with children or observation. From August 2017 Scottish National Standardised Assessments (SNSAs) are available to support professional judgement. SNSAs are very helpful, short focused assessments of specific aspects of Curriculum for Excellence literacy and numeracy. **They cannot be used alone to confirm judgements of achievement of a level, and should not be used for that purpose.** Like any assessment task or tool, SNSAs can be used in P1, P4, P7 and S3 at a time which suits the needs of individual children or groups. Through a new programme of professional learning, teachers are being supported to use the results diagnostically to help plan next steps in learning. The introduction of the SNSAs is a good time to review and where necessary reduce the assessment burden on children. For many children, switching to the SNSAs will mean a significant reduction in the time they spend on standardised assessment.

The Council are invited to:

- Offer any feedback or advice on our approaches to improving learning, teaching and assessment, based on the latest evidence
- Advise on the improvements made to the assessment model in Scotland since the OECD report in 2015 and ways in which we can support further improvement in assessment at school level.

Supporting improvements in subject-specific pedagogy

3. Scottish Ministers' clear aim is to create an education system that is led by schools and teachers, consistent with the design and aspirations for CfE as a truly school-and teacher-led curriculum. The *Next Steps* document published in June 2017 set out a number of planned reforms to support greater investment in, and support for, teachers and practitioners to enable them to become empowered, skilled, confident, collaborative and networked professionals.

Regional Improvement Collaboratives

4. Over recent years, the tailored education improvement support which local authorities have been able to provide to schools has reduced significantly. Resources have focussed on frontline delivery and, in a number of smaller local authorities, there is no longer the critical mass to deliver the improvement support which schools need. To support our vision for CfE and our education system, it is crucial that there are sufficient numbers of staff with educational expertise and with a dedicated focus on supporting professionals to improve educational outcomes. Many local authorities have identified the benefit of working across boundaries to support improvement, share knowledge and expertise and develop joint approaches. However, these initiatives vary in their nature, scope and maturity, and schools in different parts of the country may not yet have felt the benefit of this collaboration.

5. New Regional Improvement Collaboratives will strengthen and support collaborative working, innovation and the sharing of best practice between schools and practitioners, by bringing together local authority and Education Scotland staff and by drawing on other resources and expertise. They will ensure the provision of sector and subject-specific advice and support, to enable teachers and schools to drive improvement, making use of all available evidence and data. They will help teachers to access the practical improvement support they need, when they need it, and will facilitate practitioner and school level collaboration on key strengths and on areas for improvement. The Scottish Government and Local Government have established a joint Steering Group to develop proposals to support the further development and implementation of Regional Improvement Collaboratives. The detailed design and staffing profile of the new Collaboratives will be informed by that work and by further discussion with stakeholders.

Headteachers and teachers as leaders of learning

6. Whilst the Regional Improvement Collaboratives will support schools and teachers to develop and improve their pedagogical practice, teachers and headteachers will be encouraged to enhance their role as leaders of learning. The new Headteachers' Charter will clearly set out school leadership responsibilities and ensure that headteachers are leaders of learning in their schools and are empowered and supported to make decisions on curriculum content and offering. This will sit alongside an enhanced professional learning offer, bringing greater focus to curriculum areas and sector-specific issues. The Regional Improvement Collaboratives will support the provision of targeted professional learning, based on identified areas for improvement and what works to support improvements to learning and teaching, informed by coherent, accessible and consistent data.

The Council are invited to:

- Advise on how to ensure that the regional improvement collaboratives impact on improving pedagogy in all schools; what should approaches to effective collaboration look like?
- Discuss ways in which national agencies and regional collaboratives engage to improve further the consistency and quality of pedagogy in all schools in Scotland

Literacy and Numeracy

Current Approach

7. Our current approach to literacy and numeracy comprises local responsibility and development mechanisms at national, regional and local levels.

8. Nationally, Curriculum for Excellence continues to place literacy and numeracy at its heart – all teachers have a responsibility for developing young people's literacy and numeracy skills, in all schools and at all stages of the curriculum. The National Improvement Framework and National Improvement Plan detail our approach to driving progression in literacy and numeracy. This includes through the introduction of national standardised assessments and benchmarks, which are helping to support consistency in teachers' professional judgements, ensuring we have a clear, data-driven, national picture of performance. Education Scotland also promote evidence-based approaches on “what works” to improve literacy and numeracy attainment through the National Improvement Hub, Glow network and Numeracy and Mathematics Hub, ensuring schools, practitioners and learners have access to a wide range of resources.

9. The Scottish Government also continues to invest in a number of programmes which target engagement and enjoyment of literacy and numeracy, including Bookbug, PlayTalkRead, Read, Write, Count and the First Minister's Reading Challenge. We have also established an annual Maths Week Scotland to raise the profile of the value and relevance of mathematics and forthcoming STEM Strategy will further develop the importance of maths skills and confidence for all.

10. National support is backed up by regional interventions which currently reside at local authority level but which, as detailed above, will move to Regional Improvement Collaboratives in the future.

11. At local level (teacher/school) our approach empowers schools to design and implement programmes of learning to embed literacy and numeracy across the curriculum. This is guided by clarity over the expected curriculum content (CfE Experiences and Outcomes) and expected standards (CfE Benchmarks) alongside a strong model of self-evaluation (the *How good is our school?* framework), which informs school improvement plans.

Opportunities for Improvement

12. Despite the centrality of literacy and numeracy within the curriculum framework, we know that there are challenges in attainment which require to be addressed. Evidence from the Scottish Survey of Literacy and Numeracy and PISA shows there is a need for improvement, which must be led strategically and nationally across the core domains.

13. As the Regional Improvement Collaboratives develop, we shall ensure that they have a key focus on improving attainment in literacy and numeracy. Education Scotland's responsibility for improvement at national level will be delivered through the Collaboratives, to ensure alignment of support with needs identified at regional level. This will include through the existing network of Attainment Advisors, continued promotion of evidence-based approaches through the National Improvement Hub, and taking forward Education Scotland's new lead role in delivering professional learning. Inspections will also focus on schools' in raising attainment in literacy and numeracy.

14. To support and drive these improvements at national level, it will be important to map out more clearly all the initiatives across Scottish Government Directorates and Education Scotland that support literacy and numeracy from early through to adult learning. This can be used to support regional improvement planning, tailored to the needs of schools and communities within each area of Scotland.

15. Moving forward we consider that some of the key elements of improvement planning at national regional or school level to be:

- **Data led.** We need to continue to emphasise the importance of targeted interventions informed by a strong evidence base and coherent data. The interpretation of data will be critical to putting in place improvements, and we expect that new support mechanisms for the profession will include support for data analysis, helping to provide insight and learning for the profession.
- **Collaboration.** The new Regional Improvement Collaboratives will focus on supporting improvement and engaging with the profession and as such, we see them as a vital mechanism to support improvements to literacy and numeracy. Their functions will include supporting curriculum improvement and professional development, enabling the development of an empowered profession capable of maximising the opportunities within our flexible framework to promote learning in literacy and numeracy.
- **Outcomes focused.** We need to maintain our focus on improving outcomes for every learner, as set out in the National Improvement Framework. Moving forward, we need to be clear on the outcomes for learner which we expect to see, to facilitate targeted interventions which drive improvement.
- **Learner centred.** Any strategic interventions will have to ensure they facilitate approaches to raising attainment which are responsive to the unique needs of each learner. This would ensure consistency with the approaches we are taking nationally with CfE, Getting It Right for Every Child, the National Improvement Framework and our reforms to education governance.

16. It would be useful to explore the Council's views on the key themes that should feature in any systematic, sequenced and selective approach or plan for literacy and numeracy and how this can be developed at regional level, to reflect the needs of schools and communities.

17. The ICEA's recommendation mirrors some of the discussion in the OECD's *Improving Schools in Scotland* report (December 2015), which also noted the lack of a national strategy in Scotland for literacy and numeracy. The report mentioned Ontario, as an example of a jurisdiction which has such a strategy and has seen significant gains in literacy. However, the report also noted that:-

- Ontario has been more successful in raising the bar than in narrowing the gap;
- Their achievements in literacy have been more significant than those in numeracy, suggesting, as elsewhere, that simultaneous large-scale literacy and numeracy reform may not be successful or sustainable; and
- The reforms were undertaken in a period of professional investment and prosperity, whereas the partnership between Government and the profession is proving to be much more fragile in the current climate of austerity¹.

18. There is much to learn from other jurisdictions' successes in this area, including Ontario's. However, we would also like to consider the Council's views on how we can best maintain our focus on raising attainment and closing the gap in both literacy and numeracy whilst learning from the challenges faced by others.

Engagement with Universities

19. We are supporting education research through the development of our Education Research Strategy for Scottish Education (published April 2017) which will support research infrastructure and independent research; consider system performance; and empower practitioners to produce and use evidence and data.

20. We have also supported the establishment of the Curriculum Studies Network at Stirling University and its recent hosting of the third International Conference organised by The European Association for Curriculum Studies (Euro-ACS). Funding is also being provided to support a PhD studentship which will consider the ways in which ostensibly similar national curricula in Scotland and Wales are developed differently within each country. The studentship will explore the impact of cultural issues and structural conditions on the way in which the curriculum has been shaped in practice by teachers.

21. However, we are aware there is more we need to do to ensure better, evidence-informed productive links between research and teaching professionals which can have an impact on practice and outcomes for all learners. We would see this as encompassing a greater range of stakeholders than solely higher education institutions, and including contributions from the college sector where we know there is effective practice and pedagogical approaches that staff in schools could learn

¹ OECD (2015), *Improving Schools in Scotland: An OECD Perspective* (p. 123)

from. Anecdotal evidence suggests that the collaboration between research institutions and the links between education professionals and researchers could be further improved. The creation of Regional Improvement Collaboratives should provide a more encouraging context for this collaboration to take place, however we would welcome any reflections or advice on how we can ensure that this happens.

How good is our School highlights that the most effective approaches to school improvement are enquiry-based. We continue to support schools to be clear about the improvement methodologies they use and to foster a sense of criticality when designing school improvement interventions. Professional enquiry networks are also beginning to foster a stronger culture of peer-to-peer and school-to-school improvement.

22. It would be useful to explore how the Council consider we can make best use of the Regional Improvement Collaboratives to stimulate more productive links between research expertise, pedagogy and teacher professional practice, and how they consider we can bind universities into a more collaborative process.

Scottish Government
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