

# Educational reform – Scottish style!



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## Abstract

The government in Scotland has made education their defining mission, setting out a clear framework for improvement based on four key aims as articulated in the National Improvement Framework (2015). One improvement driver is Assessing Children's Progress. This new approach to assessment has been developed to integrate curriculum, assessment (particularly classroom assessment) and pedagogy. Teacher professional judgement has been central to this, and national initiatives have focused on supporting and strengthening it. In this context, the SNSA was launched in 2017, and is a national assessment tool to support improvement in classroom practice while still providing local and national oversight. This innovative approach to national assessments has started well; however, it has also drawn criticism from those inclined to a more traditional form of national standardised assessments or none at all. Professor Andy Hargreaves (University of Boston) and member of the International Council of Education Advisers to Scotland recently commented 'I think that the solution that is being tried here is different. It involves asking how we use large-scale assessments to inform teachers' professional judgement ... Scotland is at the leading edge in that regard. It is good that you are watching the world, but the world is watching you.'

## Background and context

The Scottish Government has made education their defining mission. They commissioned and received a report from the OECD in 2015 *Improving schools in Scotland: An OECD perspective*<sup>1</sup>. In response to this report, a number of education reforms were planned including the National Improvement Framework (NIF) (2015).<sup>2</sup> There was broad consensus for the concise framework for improvement based on four key aims:

- improvement in attainment, particularly in literacy and numeracy
- closing the attainment gap between the most and least disadvantaged children and young people
- improvement in children and young people's health and wellbeing
- improvement in employability skills and sustained, positive school-leaver destinations for all young people.

## A new approach to national assessment

There are a number of improvement drivers in the NIF, one of which is assessing children's progress.

As part of the development of the NIF, the Scottish Government, in response to OECD recommendations, decided to stop the national sample-based survey, the Scottish Survey of Literacy and Numeracy (SSLN) and adopt in its place a new, census-based approach based on teachers' professional judgement: The Achievement of Curriculum for Excellence Levels Return. Data are collected from schools each June detailing the proportion of children in Primary 1 (P1), Primary 4 (P4), Primary 7 (P7) and Secondary 3 (S3) who have achieved the relevant Curriculum for Excellence (CfE) level. These ACEL data are published each December.

This new approach to assessment has been developed with the focus on the integration of curriculum, assessment (particularly classroom assessment) and pedagogy. Central to this has been an emphasis on the role of teacher professional judgement. National initiatives have therefore focused on supporting and strengthening the centrality of teacher professional judgement.

In this context, the Scottish National Standardised Assessments (SNSA) were commissioned (2016).<sup>3</sup>

They were designed to incorporate OECD (2016, p. 157) advice:

Standardised assessment tools can be used formatively in all parts of the system if they are referenced to the curriculum, flexible in their use, and provide high quality just-in-time information for teaching and learning, while at the same time having efficient ways to aggregate the results through the system.

The SNSA is a 'low stakes' assessment and aims to provide Scottish teachers with diagnostic information on aspects of reading, writing and numeracy to support the teacher's assessment of children's progress and to plan next steps in learning. This information helps teachers to support individual children as early as possible and avoid attainment gaps widening as children move through school. The SNSA also provides information at a class, school and local authority level, which can be used for improvement purposes.

## The Scottish National Standardised Assessments

The SNSA were launched in August 2017. The assessments are delivered on behalf of the Scottish Government by the Australian Council for Education Research International UK (ACER) and their partners SCHOLAR (Heriot Watt University) and Twig World (Glasgow). The SNSA comprise an assessment and reporting system delivered through an online platform, an SNSA public website, a training programme for teachers and school staff (SCHOLAR), and a service desk (Twig World) providing advice by phone and email.

### Key features of SNSA

The SNSA program has a range of important and innovative features.

#### I. It is delivered online

Children and young people undertake the assessments using a digital device: a desktop computer, laptop or tablet. The assessments can be done on any device or browser depending on the availability in the school. The assessments are delivered online, and because all items (questions) are automatically scored, teachers can access their learners' reports as soon as an assessment is completed.

Within this flexibility of delivery, the content of the assessments, within the adaptive design model, remains consistent.

1 <http://www.oecd.org/education/school/Improving-Schools-in-Scotland-An-OECD-Perspective.pdf>

2 The National Improvement Framework – the agreed national framework for Scottish Education and integral part of Scottish Education Reform <https://www.gov.scot/policies/schools/national-improvement-framework/>

3 The SG evidence paper submitted to the Scottish Parliament Education Committee (December 2018) and the SNSA National Report (December 2018) are a useful overview. [https://www.parliament.scot/S5\\_Education/Inquiries/20181221Scottish\\_Government.pdf](https://www.parliament.scot/S5_Education/Inquiries/20181221Scottish_Government.pdf) and <https://www.gov.scot/publications/scottish-national-standardised-assessments-national-report-academic-year-2017-2018/>. SNSA User Review (produced by SG to inform forward planning and continuous improvement) - <https://www.gov.scot/publications/scottish-national-standardised-assessments-user-review-year-1-session-2017/>; National Improvement Hub (P1 case studies) - <https://education.gov.scot/improvement/self-evaluation/primary-1-snsa-case-studies>

## 2. It is adaptive

The questions presented to children and young people vary according to how well they are performing on the questions they have answered so far. ACER uses an adaptive model using ‘testlets’ (around 10 items) giving six possible pathways through the assessment. The adaptive design means that the diagnostic value of the assessment is optimised. The adaptive design, when working well, enhances the learner’s experience of the assessment and serves optimally in establishing where children and young people are in their learning development.

## 3. It has a carefully judged number of questions per assessment

Each assessment has from 30 to 36 scored items, with the number of questions increasing from Primary 1 to Secondary 3. On average, in the 2017 to 2018 academic year, children and young people completed each of the assessments within 30 to 40 minutes (less than 30 minutes for Primary 1 children). However, there is no time limit for completing SNSA, and where a teacher judges it necessary, a child or young person may take a break and come back to pick up the assessment where they left off.

Each question in the assessments has been empirically tested to make sure it ‘works’. In addition, every question has been reviewed and signed off by a panel of experts from within Education Scotland.

## 4. Responses are objectively scored

The majority of questions in SNSA are in ‘selected response’ format, mostly multiple-choice. This provides reliability and standardisation, ease of marking and good curriculum coverage. Reports can be accessed as soon as an assessment is completed, so teachers can use the formative feedback immediately.

Other features of the SNSA program are specific to the Scottish education context.

## 5. It covers agreed elements of Curriculum for Excellence

The assessments have been constructed to align with the CfE. A design for each assessment covering organisers and learning statements defined in the *Benchmarks: Literacy and English and Benchmarks: Numeracy and Mathematics* (Drafts, August 2016) was agreed with the Scottish Government and Education Scotland before the assessments were built. It should be noted that for the academic year 2018 to 2019, the final version of the *Benchmarks* (published in June 2017) is used as the reference point for the assessments.

## 6. It has a flexible delivery model

The flexible delivery model is intended to allow children and young people to be assessed at any time in the school year that is judged suitable for the school, class and individual learner. A consequence of the flexible timing is that, when interpreting the results of the assessment at individual, class, school, local authority or national level, the point in the school year in which the assessment was taken needs to be taken into account. Two norming studies were completed to provide Scottish teachers with two comparative national norms – in November or March.

## 7. It is designed to be accessible to all learners

The system is designed to be compatible with a range of assistive devices, so that learners can use familiar devices from their everyday use in the classroom to support them in completing the assessments, including software and devices such as text readers, screen readers and switches. Detailed guidance is available for teachers in relation to additional support needs (ASN) and English as an additional language (EAL).

## Implementation approach

ACER was appointed to develop and deliver the SNSA in October 2016. The assessments went live in August 2017, which was a very challenging timescale. This was achieved through hard work and a successful partnership approach between ACER and the Scottish Government.<sup>4</sup>

Alongside the technical and test development tasks, the SNSA undertook a considerable stakeholder engagement program in order to gain professional feedback and win hearts and minds for the new assessments.

Education Scotland staff, as experienced classroom practitioners, reviewed each of the proposed questions for the SNSA in January 2017, which led to agreed content for the first year of SNSA and the establishment of the quality assurance process. An original ‘alpha’ design was trialled in five local authorities with over 60 schools taking part (February 2017). The updated ‘beta’ design was showcased to more than 25 local authority and headteacher groups (June 2017), alongside trials with individual pupils to determine how children would respond to the questions and the SNSA platform.

<sup>4</sup> ACER has collated a number of key documents on the design and development process that are available securely on request.

## Website and training

An SNSA public website was launched in June 2017 and a SNSA service desk established, both operated by TWIG.<sup>5</sup>

SCHOLAR recruited a new training team, and produced and provided a range of training courses, planned in conjunction with requirements of local authorities for their schools. This was a significant undertaking and demonstrated a commitment to support teachers with the new assessments.

## Successes and challenges

There have been considerable successes since implementation two years ago:

- More than 570 000 assessments were completed by children and young people in P1, P4, P7 and S3 in each academic year, which equates to a higher than 90 per cent uptake rate.
- Training has reached, in person, more than 11 000 participants with help and support materials available at all times online.
- The support desk has responded effectively to more than 10 000 enquiries.
- There is growing evidence that the information generated by the assessments and reports is being used to plan effective next steps in learning. This, in turn, gives teachers more confidence in assessing children's progress, with a more consistent understanding of the standards expected of CfE levels in literacy and numeracy.

Towards the end of the first year there were emerging concerns about aspects of the SNSA. These included:

- concerns that children in P1 (age 5) were too young to be formally assessed, causing them undue stress
- a view that standardised assessments negated a more play-based pedagogy in the early years
- concern that the real reason for the SNSA was to provide accountability data for national government
- increased workload pressures on teachers in order to satisfy national government demands.

The SNSA became a political issue and this led to debates and a vote in the Scottish Parliament, and the commissioning of a number of reviews on aspects of the SNSA, particularly with P1 children.

These reviews have now concluded and are available for further study on the Scottish Government website.

## Looking forward - areas for thought and further research

This new approach to national assessments has started well; however, it has also drawn criticism from those inclined to a more traditional form of national standardised assessments (high-stakes, summative) or none at all (play not tests).

Establishing and operating a national assessment program that is formative and diagnostic in approach is innovative. Empowering schools and maintaining the focus on teacher professional judgement at a census level as the key measure of children's progress is a laudable ambition but not without risk.

Professor Andy Hargreaves (University of Boston), member of the International Council of Education Advisers to Scotland, recently commented. 'I think that the solution that is being tried here is different. It involves asking how we use large-scale assessments to inform teachers' professional judgement ... Scotland is at the leading edge in that regard. It is good that you are watching the world, but the world is watching you.'

The Scottish Government, having made education their defining mission, needs evidence that this approach works and delivers on their political ambitions.

The next stages for Scottish education are to demonstrate that the faith in teacher professionalism and the use of national programs such as SNSA because a formative rather than summative approach can deliver on the dual aims of excellence and equity. Supporting teachers and schools to raise standards (excellence) and close the poverty-based attainment gap (equity) is now the driving focus of government initiatives and research.

The Scottish Government's partnership with ACER is an important and enduring part of this educational reform, where innovative practice and ongoing research can really make a difference.

<sup>5</sup> <https://standardisedassessment.gov.scot/>