The Annual National Assessments: What Is Their Value?

“Let me be clear; the ANAs should not be scrapped – they are one of the most important policy interventions in the last ten years”

Dr Nic Spaull

1. Introduction

The Annual National Assessments (ANAs), first rolled out as a pilot project in 2009 to approximately 1000 schools, is a national standardised numeracy and literacy exam that was written, in 2014, by 7 376 334 students from 24 454 schools. The test, annually written by Grades 1-6 and 9, is mainly used by the Department of Basic Education (DBE) as a formative assessment tool; it is a diagnostic tool to evaluate where gaps exist in teaching, so that learning needs are identified and classroom practices are adjusted to respond to these needs. According to the DBE’s education sector plan, the ANAs are expected to improve learning in four key ways, namely:

1) exposing teachers to best practices in assessment;
2) targeting interventions at the schools that need them most;
3) giving schools the opportunity to pride themselves in their own improvement;
4) giving parents better information on the education of their children.

The arguments around the usefulness of the ANAs are mixed, with some commentators arguing that they are a waste of resources because their results are not adding value; there is already a host of tests that point to the weaknesses in the education system. Others, like the South African Democratic Teachers Union (SADTU), argue that they should not be administered annually, but rather every third year. However, some experts defend the ANAs, believing that they provide information that could be used to improve the performance of some schools.

In May this year, the Catholic Parliamentary Liaison Office and the Catholic Institute of Education held a roundtable discussion with Dr Nic Spaull and Ms Carla Pereira speaking on the usefulness of the ANAs. This paper highlights some of the main points of discussion.

2. The Potential of ANAs

The ANAs are essentially formative assessments, as opposed to summative assessments, and are designed to draw on information gathered in the assessment process to identify learning needs and to adjust teaching. Summative assessments refer to the type of performance assessment, such as end of year exams that is used to determine whether a learner has passed or failed. Formative assessments are sometimes referred to as assessments for learning while summative assessments are assessments of learning.

The development of the current ANAs has been a work in progress since 2001 when the Department of Basic Education (DBE) rolled out...
the sample-based Systemic Evaluation Programme which involved sampling between 35000 and 55 000 learners in Grade 3 (2001), Grade 6 (2004) and again Grade 3 (2007). The rationale for the Systemic Evaluation Programme was the realisation that in order to improve the performance at Grade 12 level, gaps needed to be identified in the earlier grades. The data sampled through the Systemic Evaluation Programme clarified some areas of weakness, and informed subsequent policy changes. The Programme was the foundation for a wider application (which became known as the ANAs) in 2008, when the DBE introduced its Foundations for Learning Campaign. In 2009, the ANAs were piloted in 1000 schools across the country, and by 2013 all Grade 1-6 and 9 learners participated in these compulsory national assessments.

In its 2011 report on the ANAs, the DBE stated that they would impact on four key areas at school and district levels: they would

1) encourage teachers to assess learners using appropriate standards and methods;

3) promote better targeting of support to schools;

4) foster the celebration of success in schools by providing schools with a clearer picture of how well they perform in comparison to schools facing similar socio-economic challenges; and

5) encourage greater parental involvement in improving the learning process.

To what extent the ANAs have realised these four ‘impact goals’ is a matter of debate amongst many education researchers and commentators. For example, SADTU argues that teachers often ‘teach to the test’ to ensure good ANAs scores because they do not want their schools to be classified as underperforming. Thus, according to SADTU, the ‘celebration of success’ goal is a self-defeating one.

2.1 Universal ANAs and Verification ANAs

All schools in the country (Grades 1-6 and 9), write the ANAs but there is a two-tiered process with regards to marking. The results of what is called the ‘universal’ ANAs are obtained through scripts which are marked at school level by teachers. These marks are then submitted to the provincial department. In order to verify the results the ANAs in a sample of schools are moderated and verified by an independent external agent. Scripts from each school are sent for marking at central marking areas and are called the ‘Verification ANA’. Clearly, the independent nature of the ‘verification’ ANAs is important as they are used to verify the results and accuracy of the ‘universal’ ANAs. In its latest ‘Action Plan’ document, Action Plan to 2019: Towards Realisation of Schooling 2030, the DBE notes that “external experts" moreover emphasised the importance of maintaining a critical level of independence in the management of the sample-based ‘verification ANA’ testing, and noted that the use of external service providers for the sample-based collections of 2011, 2013 and 2014 was a positive feature”. The DBE further states that the external experts, including the World Bank, support the use of the universal and verification ANAs, but they also recommend that the former should focus on changing practices in classrooms and schools, while the latter should concentrate on "producing performance information that is comparable over time and across provinces". However there is concern that in 2014 the Verification ANA lacked credibility.

3. The Weaknesses and Challenges

As was noted earlier in this paper, the ANAs have had much criticism levelled at them from various quarters.

3.1 Lack of independence

Stellenbosch University's Dr Nic Spauld argues that the major challenge to the success of the ANAs is that their administration is not independent, unlike – for instance – the matric exams which fall under the independent quality assurance body Umalusi. He further argues that because the ANA tests are set, marked, and reported on by the DBE, the ANA system is “tainted by politics because it has been used for political purposes before it is of sufficient quality and independence to do so.” Many have argued that rolling out the ‘verification ANAs’ nationally would negate the lack of independence argument. Ultimately, both versions of the ANAs are needed, but some guarantees of independence should be included in the administration of the universal ANAs.
3.2 Weak accountability

Closely related to the issue of the lack of independence is the issue of accountability. Who should be accountable for low ANAs tests scores? Is it the Minister, provincial departments, districts, school principals or teachers? It is, unfortunately, the individual schools and the teachers that are held responsible for poor test scores. However, it is unfair that teachers are blamed as the weak link. Similarly, should a principal be held accountable for the low scores and his/her school be deemed underperforming? It is tempting to do so, but a greater emphasis on accountability at school level may also lead to narrowing of the curriculum and to score inflation as teachers ‘teach to the test’ to avoid being labelled as ‘underperforming’.

Principals are often shamed in front of others for their schools’ results. In addition very little guidance is given for how to deal with learners with leaning problems. Many officials insist that they write the tests thus further impacting the schools results.

3.2 Non-comparability

Every year when the DBE announces the results of the ANAs it inevitably compares the results to the preceding years, in order to emphasise any improvements. However, Dr Nic Spaull and others have pointed out that the results are not comparable year on year across grades and even between geographical locations. According to Dr Spaull, for the tests to be comparable they need to include some common questions (or anchor items) across grades and across the ANA cycles to allow for comparisons between performance on the common questions and performance on the non-common questions within and between tests. The ANAs do not have these common questions, either across or within the ANAs cycle. Thus, it is not correct to speak of decreases or increases in the ANAs scores.

The DBE has acknowledged in their Action Plan to 2019 that common questions/anchor items should be included in the ‘verification’ and ‘universal’ ANAs. In the document the DBE states that it will “ensure that starting in 2015, ‘verification ANA’ tests will be secure and include anchor items. Also, the DBE will start exploring item response theory (common question inclusion) starting in 2016.”

3.3 Lack of support and guidelines

One of the main aims of the ANAs is to assist schools, teachers, parents and district managers to identify teaching and learning challenges, and to apply the necessary remedial steps. However, it has been argued that teachers, schools and district managers often do not know the purpose of ANAs or how to apply the data-rich ANA results. There is a general lack of clear guidelines and an inability at school level to identify learning and teaching challenges, and to make informed interventions using the ANA data. The DBE has recognised this weakness and has stated in its Action Plan to 2019 document that it will prioritise the production of a clear policy statement on the basic logic of the ANAs, and how they should be used by schools, teachers, parents and all other stakeholders at district level. However, it also seems that the DBE has heeded the red flag raised by SADTU and others about the adverse consequences of making the ANAs a high-stakes process. High-stakes assessments attach rewards and punitive actions to test scores which may lead to teachers encouraging rote-learning and the memorization of facts, rather than actual understanding.

3.4 ANA’s and Independent School Subsidies

The National Norms and Standards for School Funding (NNSSF) states that the subsidy for independent primary schools is paid providing that the school’s average in the Grade 3 or Grade 6 ANAs is equal to or higher than the provincial average (a high school is measured against the provincial average in the National Senior Certificate). This in effect means that for these schools the ANAs are a high stakes assessment. The tests from these schools are to be treated as in the same manner as the Verification ANAS. Given the problems outlined above this is now a contested area.

4. ANAs as a Teacher Resource

Despite the many weaknesses of the ANAs, the data generated can be a great resource to teachers. In 2011 Jet Education Services carried out a pilot study with a small group of Foundation Phase teachers in the Eastern Cape to ascertain how they used the ANA data to inform their teaching practices. What the study found was that the teachers focussed too narrowly on the overall results and trends; they struggled to interpret the learners’ level of understanding; they struggled to interpret partial understanding and alternative
methods; and they could not formulate teaching strategies to address the weak areas of the learners. The pilot study ultimately led to a bigger study that focussed on how teachers can use error analysis (analysing the mistakes of learners in the ANAs) to adapt their teaching methods. Jet Education Services, together with the United Nations Children's Emergency Fund (UNICEF) and the DBE, has developed the Annual National Assessment Data Usage Programme targeting Grades 3, 6 and 9 mathematics subject advisors and teachers, with the provision of resource materials and training. The resource materials show how assessment data can be utilised in a manner which will improve teaching.

The programme includes the provision of a guide for subject advisors and teachers on how to analyse errors in ANAs (and other test data) and how to use these to improve teaching and learning. The guide also includes a presentation of various teaching strategies which teachers could use to adapt their teaching in order to address the weaknesses evident in learner responses to items in the ANAs. By the end of May, 85 subject advisors, from all nine provinces, had undergone training in the programme.

5. Conclusion

The potential usefulness of the ANAs is not in doubt, despite the fact that some have argued that South Africa's education system does not need more testing. It would be remiss not to point to the fact the ANAs provide the education community with a glimpse into myriad challenges that exist; something that has not been achieved up to now with such systematic regularity. It is perhaps for this reason that educationists like Dr Spaull (echoed by the DBE’s advisory committee) have argued that the ANAs are essential; and that certain aspects of them should be improved. Improving the administration of the ANAs will also help to raise their status, and to ensure that more attention is given to the data. The way forward to improving the ANAs should include better reporting and communication to the school community; sorting out the lack of administrative independence issues; applying item response theory as a matter of urgency so that the ANAs results can be compared year on year; and exploring the question of whether the ANAs would be best administered annually or bi-annually?

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4 In the 2011 the HSRC acted as the independent agent; in 2013 the task was performed by Deloitte.
5 The DBE appointed an advisory committee which includes international experts. The advisory committee comprises Professor A Kanjee (Chairperson) from Tshwane University of Technology, Professor. S Howie from the University of Pretoria, Mr. G Khosa: from JET Education Services, Dr. E Sikali from NAEP, USA, Dr. E Greer also from NAEP, USA as well as Dr. A Govender from the University of Fort Hare.
6 Department of Basic Education (2015): Action Plan to 2019 – Towards the realisation of schooling 2030
7 Nic Spaull (2015): Presentation at the CPLO roundtable discussion, 04 May 2015
8 Jane W Looney
9 Nic Spaull (2014): Assessment results don’t add up. Mail & Guardian Online. Available at http://tinyurl.com/qy8jz9l
10 SADTU: (draft version) Annual National Assessment (ANA) --A SADTU perspective. Executive Summary.
12 The resource material is entitled “Using Learners’ Responses to inform the Teaching and Learning of Mathematics: Resource Materials Based on the Annual National Assessment (ANA)”