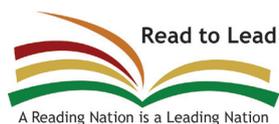# PROTOCOL DOCUMENT ON TEACHER DIAGNOSTIC ASSESSMENTS
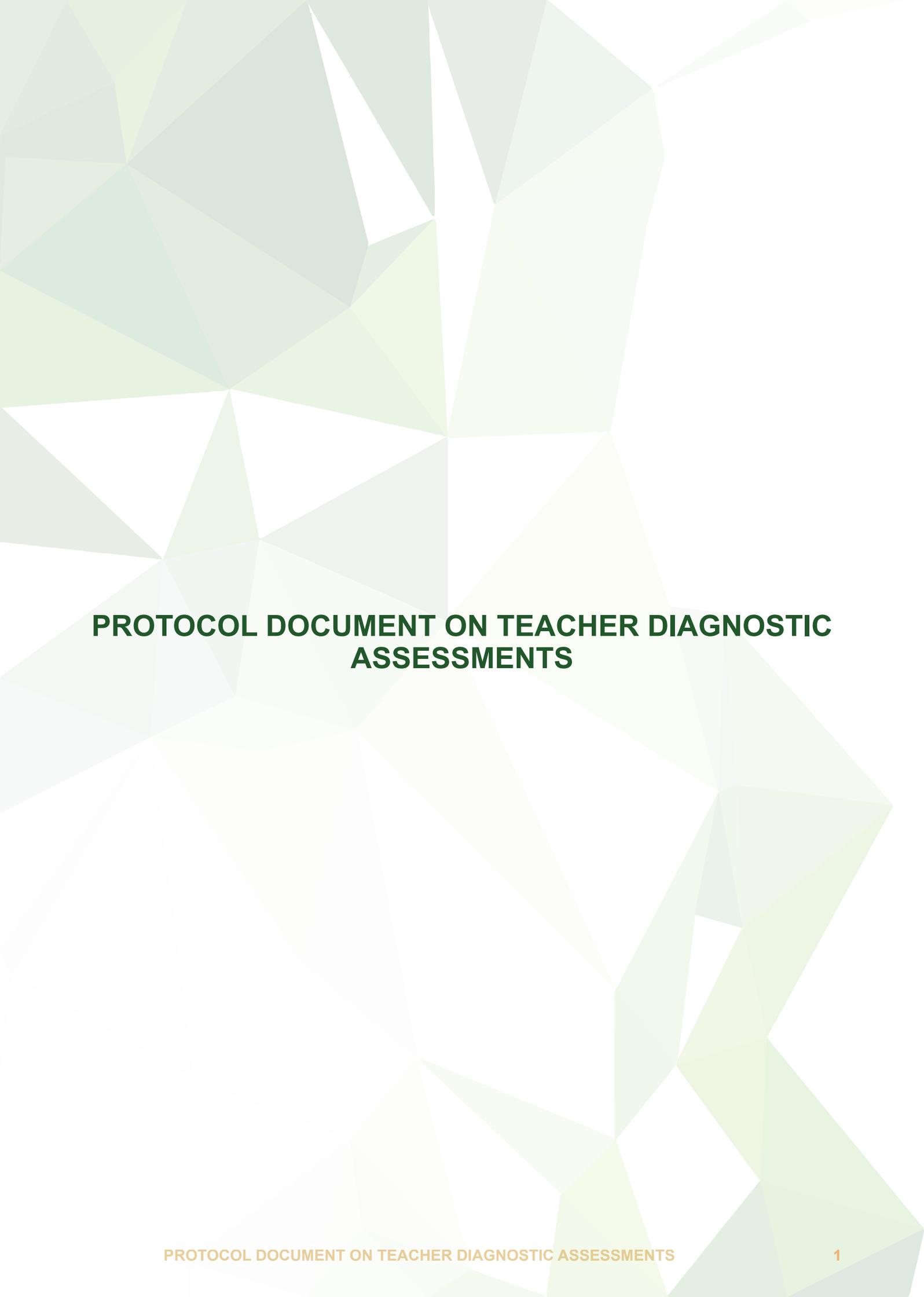

basic education
Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

Read to Lead
A Reading Nation is a Leading Nation

NDP 2030

PROTOCOL DOCUMENT ON TEACHER DIAGNOSTIC ASSESSMENTS

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Foreword

In 2011, the Minister of Basic Education, Mrs A Motshekga and the Minister of Higher Education and Training, Dr B. Nzimande launched the Integrated Strategic Planning Framework for Teacher Education and Development (ISPFTED) to strengthen the progress and address the challenges in improving teacher quality. The key objective of the policy is to ensure that the quality of teacher development programmes is improved in order to improve the overall quality of teaching and learning. The National Development Plan stresses the need for teachers to take the initiative to identify the areas in which they need further development. It also emphasizes on the need for teachers to improve their knowledge of the subjects they teach.

Whilst the sector recognizes that there is the Integrated Quality Management System (IQMS) which has been in place since 2003, the design of the IQMS is not suitable to identify teacher knowledge gaps.

The ISPFTED takes the matter further and provides mechanisms through which these objectives may be achieved, which is through the roll out of diagnostic assessments which will be available in computer-based online format or through the paper-based format. The DBE has entered into a partnership with SASOL INZALO who, together with their partner Siyavula, has developed an online platform for the assessment of both Teachers and Learners. The online platform currently caters for two subjects, Mathematics and Physical Science. As part of the partnership, further work will be done to expand the development and provision of diagnostic assessments in lower grades and in other subjects.

The paper-based assessments are currently being administered in the form of pre and post-tests. The DBE has further developed the Moodle platforms, which enables the Pre and Post Test to be administered online. Through this platform, the DBE will ensure that there is proper planning for training and the undertaking of these tests, but the platform will also assist to create a database of teachers who have been exposed to training.

This protocol has been developed in order to provide guidance on what processes need to be followed in undertaking both self-diagnostic assessments as well as using the Moodle platform to for Pre and Post Test. The protocol was approved by HEDCOM in December 2018.

MR HM MWELI

DIRECTOR-GENERAL

BACKGROUND

The Integrated Strategic Planning Framework for Teacher Education and Development (ISPFTED) is a policy that was developed after the education sector summit of all stakeholders in 2009. The policy has been in place since 2011. The key objective of the policy is to ensure that the quality of teacher development programmes is improved in order to improve the overall quality of teaching and learning. The policy aims to improve the quality of teacher development programmes through, amongst others, ensuring that:

1. There is strong coordination between various stakeholders in the delivery of teacher development programmes;

2. There are strong institutional mechanisms in place to coordinate and deliver teacher development programmes;

3. The quality of programmes delivered to teachers is monitored through the endorsement of programmes and the approval of training providers by the South African Council for Educators;

4. Mechanisms for teacher needs identification are strengthened through the delivery of teacher diagnostic assessments, and

5. Teachers are recognised and credited with professional development points for engaging in professional development.

The key objectives as outlined above are also aimed at supporting and realising the key objectives of the National Development Plan which states the following regarding teachers:

- *"Help teachers develop **better ways** of delivering the curriculum using the learner workbooks that are provided, including structuring lessons, covering the material in the curriculum and conducting assessments. This should be the short-term focus and directed at in-service teachers. As teachers gain confidence and develop skills to deliver the curriculum, the focus will move to other aspects of teacher development.*

- *Help teachers **improve** their **knowledge** of the subjects they teach. This is of critical importance. Teacher development should build teachers' subject knowledge and provide training in effective teaching methods. Teacher development programmes should be targeted at those areas where teachers' subject knowledge is weakest.*

- *The department, schools and professional bodies should be involved in organising and delivering teacher development activities. Teachers must also take the initiative to **identify** the **areas** in which they need further development and approach the department for assistance to access training opportunities. Courses that are in line with the requirements of the teacher's job must be **fully subsidised** by the government and should take place outside term time. On completion of the course or professional development activities, teachers should **earn points** towards meeting the continuing Professional Teacher Development requirements of the South African Council for Educators."*

As indicated above, the NDP stresses the need for teachers to take the initiative to identify the areas in which they need further development. It also emphasizes on the need for teachers to improve their knowledge of the subjects they teach.

Whilst the sector recognizes that there is the Integrated Quality Management System (IQMS) which has been in place since 2003, the design of the IQMS is not suitable to identify teacher knowledge gaps.

The Department of Basic Education as well as the Provincial Education Departments have the responsibility to provide the tools and the mechanisms through which teachers can realise the objectives as outlined in the NDP. The ISPFTED takes the matter further and provides mechanisms through which these objectives may be achieved, which is through the roll out of diagnostic assessments which will be available in computer-based online format or through the paper-based format. The paper-based assessments are currently being administered in the form of pre and post-tests.

PURPOSE OF TEACHER DIAGNOSTIC ASSESSMENTS

Teacher diagnostic assessments can be undertaken by individual teachers at their own time and pace using both online and paper based assessments. Diagnostic assessments can also be used by training providers to diagnose knowledge and skills gaps in specific subjects. This will be used to inform the content of programmes to be delivered to teachers to fill the gaps. The purpose of diagnostic assessments can be summarised as follows:

- To generate data around the knowledge and skills of teachers in specific subjects;

- To inform the content of teacher training programmes

- To drive the process of self-reflection by teachers and to ensure that they engage in on-going professional development

- To support processes for the professionalization of the teaching profession, and

- To generate data to support the work of Professional Learning Communities.

SECTION A

1. PROTOCOL IN THE MANUAL ROLL OUT OF PRE AND POST TESTS

The following process will have to be undertaken in the roll out of paper-based diagnosis, which is the Pre and Post-test.

STEP 1

The DBE/Province will monitor learner performance in a specific subject and grade, and analyse different types of assessments, preferably formal assessments. Subjects where performance is below thresholds as determined by the Province will have to be targeted for intervention. The intervention may be for both learners and teachers.

STEP 2

Once low performance has been identified in a specific subject or grade, a developmental programme will have to be designed based on a more in-depth analysis in areas of poor performance. This may be include, but not limited to item analyses of question papers.

STEP 3

The unit responsible for teacher development, or the teacher development institute where it exists, will have to collaborate with the subject advisor responsible for the subject to agree on the content of the training as well as all the relevant logistics regarding the training. The role of the teacher development institute is critical in this regard to drive the research process as well as the process for developing an appropriate intervention programme.

STEP 4

Proper planning will have to be undertaken at different levels to ensure that teachers are not removed from classes and miss critical teaching time. Since time for training is limited, prudent planning is critical to avoid double bookings and other logistical problems. Teacher Development officials from the institute must request the training plans from the different subject advisors in order to develop a calendar that everybody should familiarise themselves with. Teachers who are targeted for training must also be given sufficient time in order for them to prepare themselves adequately for the training.

STEP 5

The teacher development institute will have to convene the relevant subject specialist or advisor as well as the Teacher Development officials to design an intervention programme. They may also seek the assistance and support of the relevant service provider in this regard, be it an NGO, Professional Association or an institution of higher learning. This process

STEP 6

Once developed, the training programme must be submitted to the South African Council for Educators (SACE) for endorsement. After endorsement, the programme will be ready for delivery to the targeted teachers.

STEP 7

Pre-Test

Each training programme must have specific objectives and competencies that must be demonstrated in line with the Curriculum Assessment Policy Statements (CAPS). A Pre-test must be undertaken in order to determine the baseline in terms of where the competence levels are in relation to where they should be. Ideally, a Pre-test must be send to teachers eligible for training at least five (5) days before the training. Teachers must be encouraged to answer the test as honestly as possible.

Marking

The trainer must ensure that all pre-test scripts are marked before the training, and an analysis made on the performance of each of the participants. In instances where the number of scripts exceeds 30, a minimum of 50% of the scripts must be sampled for marking. (Sampling is still appropriate since the purpose is to diagnose) A register of all teachers who undertook a Pre-test must be kept, together with the marked scripts and the analysis.

STEP 8 (A)

At the training venue

A register of all training attendants must be kept, which is different from the one kept for the pre-test. Trainers must ensure that the training venue is adequate to enable various activities as per the specifications and training outcomes. It is also important that the training room must not be overcrowded, and that it must be well ventilated. Trainers must ensure that as far as possible, different delivery approaches are adopted to maximise the learning experiences of trainees.

Sitting arrangement

Whilst the attendants may not be forced to write their names on the scripts, mechanisms must be designed to enable identification of the teachers for audit and validity purposes. Numbers may be allocated according to the sitting arrangements.

STEP 8 (B)

Use of Broadcast Solutions

The DBE is also moving towards the use of a broadcast solution as a way of improving the training efficiency, as well as improving coverage and reducing costs in the process. Broadcast solutions are available through various platforms, including UNISA and VODACOM. Provinces are encourages to use these platforms

Central Facilitation

All the facilitators at the central level will have to orientate around the operations of the broadcast facility, including issues of positioning, pitch of the voice, etc. The facilitators will also need to have prepared materials that can be beamed to all the connected centres, and avoid having to do a lot of writing. Facilitators need to arrive at the venue at least 45 minutes before the live broadcast in order to ensure that they establish connection with all the centres, and to deal with all other logistics. They will also have to ensure that coordinators in different centres know what they are supposed to do, and how to manage their centres in order to avoid unnecessary disturbances and disruptions.

Coordinators at various centres

The programme manager must ensure that each centre that will be connected has a coordinator. All coordinators must be trained on what they are supposed to do in order to maintain order and control at their centres.

STEP 9

Post test

A Post-test must be undertaken at the end of a training programme. It should be noted that a training programme may be undertaken in a number of training sessions. A Pre and Post-test may not be necessary for each session, but must be undertaken at the start and the end of a training programme.

Marking

The trainer must ensure that all Post-test scripts are marked after the training, and an analysis made on the performance of each of the participants. Comparison need to be made between the Pre and the Post test to determine if there has been successful knowledge and skills transfer. The analysis will also inform the training if there is a need for a follow up training or not.

In instances where the number of scripts exceeds 30, a minimum of 50% of the scripts must be sampled for marking. (Sampling is still appropriate since the purpose is to diagnose) A register of all teachers who undertook a Post-test must be kept, together with the marked scripts and the analysis.

STEP 10

Reporting

The training provider must ensure that all teachers who have participated in an endorsed programme are credited with professional development points, both for the assessment as well as the training. A list of teachers who undertook the tests and those who participated in the training must be submitted to SACE.

STEP 11

Evidence

The following evidence is required for supporting the achievements as per the reports:

1. A copy of the plan for the assessments and the training

2. An attendance register for the Pre-Test(The title must reflect as such)

3. A separate register for training

4. A separate register for the Post Test

5. Marked Scripts

6. Analysis report

SECTION B

2.   PROTOCOL ON THE USE OF THE DBE MOODLE PLATFORM

The DBE Moodle platform is an online platform that has been designed to maintain a record of all the teachers trained in the system (National and Provincial level). The system has also been designed to allow for the loading of the pre and the post test, as well as ensuring that the tests are marked and analysed online. The Moodle platform is expected to benefit the sector in the following ways:

1.   Pre-tests will be undertaken ahead of the training, thereby allowing trainers to address the challenges of the participants during the training rather than after the training;

2.   The platform will allow for proper planning and identification of teachers to be trained;

3.   The use of the Platform will accelerate the much needed use of technology in teacher training;

4.   The system will have a database of all teachers who have been trained, thereby allowing such teachers to be credited with SACE professional Development Points;

5.   The loading of teats on the platform will assist with evidence for audit purposes, doing away with the laborious exercise of shuttling around scripts, and

6.   The system will allow for online marking, taking the burden away from trainers to mark the pre and the post test.

The following procedure will be undertaken when using the Moodle platform:

STEPS

The procedures from **STEP 1** to **STEP 6** as in **section A** will apply as is.

STEP 7

Pre-Listing

The programme managers must identify teachers who are eligible for attending the training. The manager will develop and allocate a training identification code for each of the potential participants. The participants may either be requested to register themselves on the programme after receiving the training code, or the programme manager may register all participants on the platform. The manager who has right of access at the DBE will be able to see the registered participants.

Pre-Test

The programme manager will develop a pre- test and its memorandum in order to determine the knowledge baseline of participants in relation to the topic. With the assistance of the DBE, the pre-test and its memorandum will be loaded onto the Moodle Platform. Communication will be send by the programme manager to the participants to take the test online. A minimum period of 5 days is recommended before the training commences, in order to allow for the programme manager to analyse the results of the tests. The Moodle system will mark the test automatically.

Post-Test

A post-test will be undertaken to evaluate if there has been effective knowledge transfer, and whether the challenges identified in the pre-test have been resolved. With the assistance of the DBE, the post-test and its memorandum will be loaded onto the Moodle Platform. Communication will be send by the programme manager to the participants to take the test online. A minimum period of 5 days is recommended after the training shall have been concluded in order to allow for the programme manager to analyse the results of the tests and evaluate if the training has been successful.

Reporting

The relevant managers with access to the platform may access information relating to training. Only the relevant managers with access to the platform at DBE may access information from all the Provinces. No Province will be able to acess information from another Province, unless such access has been granted. The platform will be used to report to SACE on training conducted for the allocation of professional development points. The platform will also be used to report to the auditor general in line with all audit requirements.

SECTION C

3.   PROTOCOL IN THE ROLL OUT OF ONLINE ASSESSMENTS

The Department of Basic Education is expected to play a leading role in facilitating the process of developing tools for teacher diagnostic assessments. This does not exclude the possibility for Provinces to have their own systems, provided that they are compliant with existing national policy. The following principles must be observed regarding the undertaking of online assessments:

1.   The assessments must be in compliance with the approved curriculum;

2.   The relevant subject specialists must ensure that the item banks or assessment items are CAPS compliant, and are compliant in terms of levels;

3.   There must be a clear process for the review and update of the assessment items

4.   Measures must be put in place to ensure compliance with audit requirements as per the prescripts of the Auditor –General

The following protocol needs to be undertaken in the roll out of online assessments:

STEP 1

National level

System development

The DBE must put measures in place to ensure that online assessments are available. These may either be developed in-house or they may be outsourced. If developed in-house, the DBE must ensure that a consultative process is undertaken that includes subject specialists and subject advisors. If outsourced, the DBE must ensure that the assessment items are evaluated regularly to ensure compliance with the curriculum

STEP 2

Development of a user-guide

Once the system has been developed, or is available, the DBE must develop a guide on how the system operates

STEP 3

Setting of targets

Based on the obligations as reflected in the Strategic Plan as well as the Annual Performance Plan (APP), the DBE will set Provincial targets to be reported against the APP on an annual basis.

STEP 4

Communication

The DBE must communicate formally to Provinces, the existence of the assessment system, the user guide as well as the set targets for reporting

STEP 5

Provincial Level

Once formal communication has been received from the DBE regarding the existence of a system and the user-guide, the Province will be responsible for ensuring that teachers in their employ participate in the system and take the tests. Provinces will develop measures to ensure that teachers are aware of the system and that they participate meaningfully. Teacher Development Institutes as well as subject specialists will be central to this process.

STEP 6

Analysis of reports

Reports of the assessments should be accessible to Districts, Provinces and the DBE. The reports must be analysed at all levels and be used to inform the design of programmes for teacher development in the specific subject.

Evidence

Evidence on the online assessments will be drawn from the online system.

CONCLUSION

The use of this Protocol will take us a step closer in ensuring that the delivery of teacher development programmes is migrated from manual to online approaches, thereby realising our objectives of using ICTs in Teacher training. This will also make it easy for teachers to be credited with SACE Professional Developments points. It is our hope that teachers will respond well to the ideas and find ways of engaging regularly with each other and specialists to improve their own subject knowledge and teaching and assessment skills.

Target Audience

This protocol is expected to be used by all teacher training providers in education. These include DBE, Provincial Education Departments, Teacher Unions, NECT, SACE, NGO'S and other private providers, Universities, etc.

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