

# Message from the editor

The seven working groups of the PrimTEd project have now all gone through the process of starting up and developing a plan and rough budget for the full three years of the project. They will get feedback and, presumably, the go ahead in the next couple of months.

One of the predictable complications that will arise from having this many groups is coordinating the workflows in the groups so that they are more or less in sync. An example of possible problems would be one of the Cross-Cutting Working Groups having a timeline of activities that assumes that one or more of the discipline-based groups (Literacy or Mathematics) will have delivered certain products by dates that fit their timeline. Clearly, once the three year plans are approved it will require a lot of sensitive negotiation and adjusting. This is one of the reasons that there will be an early meeting of the National Working Committee.

# National Working Committee

The National Working Committee (NWC) consists of representatives from DHET, the Working Groups and the National Programme Coordination and Management Body. It serves to provide intellectual leadership and technical support, and to coordinate and synthesise the work of the eight working groups into a coherent set of recommendations regarding initial teacher education programmes at primary level.

The first meeting of the committee was held on 21 October and attended by twenty people. It dealt with progress reports from the DHET's Whitty Green, the DBE's Gerrit Coetzee, and JET's Nick Taylor. The latter stressed the importance of cross-institutional links that will help the sharing of ideas and the development of the institutions' own capacities. The individual working groups also reported on their progress.

Much of the meeting was of necessity taken up with various administrative and financial matters and the queries from the Working Groups about these.

The National Working Committee is scheduled to meet again on 7 March 2017.

Developing new teacher graduate's ability to teach literacy in African languages and in English First Additional Language with a special focus on reading.

### **WORK GROUP NEWS**

# Literacy Work Groups – the Consolidated Literacy Work Group (CLWG)

This working group has had a number of meetings and has developed a long term plan for the next three years with over twenty sub-projects or outputs ranging from literature reviews, annotated bibliographies, research on decoding strategies to building up a set of competency standards for teachers (and the associated items to assess them), a curriculum framework for literacy and development of exemplar materials for such a curriculum.

It will be kicking off with an audit of the B.Ed. Courses/modules currently used to teach language and literacy educators.

### **Mathematics Work Groups**

### The Mathematics Indaba – 12-14 December 2016

With the theme of "Meaningful and Effective Mathematics Teaching and Learning: in search of the 'South African pedagogical identity'" the indaba, led by the Ministry of Basic Education, was attended by nearly 100 maths educators from the DBE, Provincial Education Deparetments, universities, NGOs and publishers who gathered at Sol Plaatjie House for three days to discuss solutions to the problem of poor performance in mathematics in the school system. The Minister and Deputy Minister both attended throughout.

While acknowledging the progress made in raising the country's mean performance on the TIMSS and SACMEQ international tests, Minister Motshekga noted in her opening address that:

"... it is only fair to say the teaching and learning of Mathematics in South Africa is like a patient in hospital. We have since moved out of the ICU into the general ward. We need to get the patient discharged and healthy."

The Minister went on to call for the reinvigoration of the teaching of Mathematics in its entirety and for the overhaul of the South African pedagogical-content knowledge outlook:



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Developing new teacher graduate's ability to teach number sense and early algebra

Developing new teacher graduate's ability to teach number geometry and measurement

Developing new teacher graduate's ability to think mathematically and to infuse their own teaching with a mathematical thinking approach

'We must as [a] matter of urgency develop a South African Pedagogical Content Knowledge Framework as a starting point.'

Delegates debated these ideas at length, through plenary presentations and commissions which ranged across a range of topics including language, assessment, curriculum, pedagogy, textbooks and manipulatives, teacher development, and the needs of the four phases of schooling. There was much talk about problem solving, deep conceptual understanding, mathematical thinking, lesson study, PCK, PLCs and CPD.

A team from PrimTEd (Nick Taylor, Corin Mathews, Gary Powell and Sharon Mc Auliffe) presented the goals, structure and deliverables of the project and the work plans of the three working groups on mathematics.

What the Indaba did not produce was clarity on what form the envisaged *South African Pedagogical Content Knowledge Framework* is likely to take. Will it be a guideline which assists teachers to understand the specifications of CAPS, a set of workbooks aligned to CAPS, or a set of lesson plans which operationalises the curriculum through a structured set of daily activities, to name just three possibilities?

The programme had planned to end the Indaba with a way forward for constructing the *Framework*, with the appointment of a 10-member Task Team and the formulation of an Implementation Plan, deliverables and time frames. However, these targets were not reached and the Indaba left these matters in the hands of the Ministry and DBE.

### Working Group 2 (WG2): Number sense

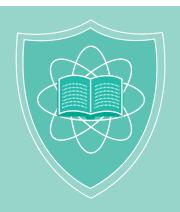
Developing new teacher graduate's ability to teach number sense and early algebra

### Working Group 3 (WG3): Shape, Space and Measurement

The envisaged activities of this group are to identify the core content knowledge and skills related to shape, space and measurement and the approaches needed to develop these in primary school teachers. This work will include an audit of how nationally- and internationally-based teacher-training institutions are currently teaching (and assessing) space, shape and measurement and of the extent of shape, space and measurement content in the South African schools' curriculum. A suggested curriculum for teacher-training institutions will be developed, specifying content and pedagogy, with integrated assessment. Existing course materials will be examined new materials developed and trialed.

## Working Group 3 (WG4): Mathematical thinking

Developing new teacher graduate's ability to think mathematically and to infuse their own teaching with a mathematical thinking approach



Knowledge
management, including
materials development,
Monitoring and
Evaluation liaison,
communication,
marketing and network
coherence.



Developing
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### **Cross-cutting Work Groups**

### Cross-Cutting Work Group 1 (CCWG1): Knowledge Management

The work of this group has concentrated on the setting up of the website to house resources and products of the PrimTEd project and to serve as a communications hub while the project is in process.

We are very pleased to report that JET Education Services has agreed to host the website (they already host a UNESCO-UNEVOC Centre which acts as a clearing-house for resources for TVET: research, case studies, databases, publications, etc.). The website should become operational in January. Resources from previous projects of the DHET and DBE related to literacy and mathematics will be made available on the site.

This working group is also responsible for the Newsletter.

Initial work is being undertaken on copyright issues and on standards for text and visual material that will be put on the website.

### Cross-Cutting Work Group 2 (CCWG2): Assessment

The aim of the work stream to develop, administer, reflect on and improve common written assessments of educator competence to be used across HEIs at two points in time: at the beginning and end of the B.Ed. or other programme. It will be a collaborative process to build a community of practice between HEIs on baseline and endline assessments.

The working group's founding question is "How do we assesses the overall competency of new teachers?", or, more specifically, "How do universities assess their trainee teachers in the B.Ed. and PGCE (including through Work Integrated Learning?"

The work stream has been very active and the whole group met for two days in November and worked on their plans for the next phase (April 2017 to March 2018)

How do we assesses the overall competency of new teachers?

#### Some Assessment issues

#### Checked on practice versus formal tests

The existence of the DBE workbooks for both literacy and mathematics (which in principle endorse the idea of almost daily "assessment") must be taken into account. Do we have to decide on a weighting between checked on practice (the regular marking of the DBE workbooks) and formal assessment (tests for term marks).

#### The ANA tests

Do we need to look at the "backwash effect" the ANA tests have on all the assessment activities that teachers do (and don't do). We know that in may schools there is some teaching to the test. But do these tests include important work? If learners are taught that work it is better than unguided random teaching?

#### Marking the markers

The Kha Ri Gude Literacy adult literacy campaign used assessment portfolios (designed by Prof. Veronica McKay from UNISA). The level was roughly grades 1 to 3. One of the most interesting things done by SAQA, which moderated these assessment portfolios, was to focus at least half of the moderation exercise not on how well the students did (should the marks be adjusted up or down) but rather on how well the markers marked. It was quite a mind shift for the educators and revelatory. How seriously do we take marking as a teacher competence?

#### The language of competence tests

With the African languages there must be work in all these languages from the start — one cannot simply translate an English test into the African languages. Whilst translating a mathematics test into other languages may superficially be simpler, the known inadequacies of the current Multilingual mathematics dictionary Grade R - 6 Second edition dictionary need to be taken into account.

Current core membership of the Assessment Group	
University of Johannesburg	Nicky Roberts (coordinator) Elbie Henning Nadine Peterson (also involved in WIL) Jackie Batchelor
University of Witwatersrand	Hamsa Venkat Lynn Bowie
Walter Sisulu University	Andrea Mbuka Jogymol Alex Yolisa Madolo
Tshwane University of Technology	Anil Kanjee
University of KwaZulu-Natal; and cross institutional as involved in Cross-Cutting Working Group: Knowledge Management	John Aitchison
Cross institutional (JET) as involved in PrimTEd overall management	Nick Taylor
Department of Basic Education	Mr Mboni Nematangari Mr Reinhard Kuhles

Teacher education academics — particularly those focussed on language and/or mathematics and/or assessment in B.Ed. programmes, who are interesting in participating in this work stream are most welcome as are those who could participate in a common assessment trial. Please contact Nicky Roberts (nicky@kelello.org).



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They have set up two task teams. The one sub-group is on Maths assessment (Hamsa Venkat [Wits], Lynn Bowie [Wits], Jogymol Alex [WSU], Anil Kanjee [TUT]) and Mike Askew [Wits] and they will be liaising with the three Maths working groups. The other sub-group will look at Literacy (Nick Taylor (JET), Yoliswa Madolo [WSU], Andrea Buka [WSU], Elbie Henning [UJ] and Reinhard Kuhles [DBE]) and liaise with the Consolidated Literacy Working Group. Both small groups will report back on 14-15 February 2017 on the outcomes of this liaison work.





Liaison with other working groups is seen as proactive engagement: requests to share emerging standards and assessment frameworks as well as exemplar assessment items will be made

These sub-groups reviewed some existing assessments (gathered from participating HEIs and JET as well as some international examples). They were tasked with liaising with the other PrimTEd working groups relating to contribution of emerging standards, assessment items; assessment frameworks; and comments on proposed items. The envisaged liaison with other working groups is seen as proactive engagement: requests to share emerging standards and assessment frameworks as well as exemplar assessment items will be made; and at the same time the assessment members will be proactive in sourcing and developing assessment frameworks, reporting templates and appropriate items for inclusion in the common assessment.

#### How the Assessment work stream, sees its task

#### Assessing overall competence

The Assessment workstream is not focussed directly or only on 'How do teachers assess learners?' or 'How well do teachers assess learners?' It is about the assessment of their general competence as teachers — on these new teachers' deployment of a whole set of competencies (relating to teaching approaches and methods, content knowledge, and assessment of learners, etc.). In other words it is about assessing their general competence as teachers of language, literacy and mathematics (which of course includes, but only as a subset of those general competencies, how they assess their learners).

#### If we do not do it somebody else will

If the Higher Education Institutions do not create our their own shared way of assessing student teachers near the beginning and near the end of the programmes, then it is predictable that either SACE or the DHET (or both) will invent a standardised assessment instrument and impose it onto HEIs.

Hence it vital that the HEIs collaborate on what they are trying to teach (a set of standards), that they then agree on these broad standards, develop materials as a way to reach these standards, and assessment items are constructed to monitor the extent to which the standards are being reached. Hence the first main output of the working group is building up a collaborative network on assessment.

#### **Developing assessment instruments**

The group want to collect assessment instruments that HEIs have used and found to give meaningful data on their B.Ed. programmes and then develop common ones that can be used by all HEIs and , it is hoped, stimulate collaboration and discussion on priorities for the foci on teaching reading, writing and doing mathematics. How the HEIs chose how to use the common assessment instruments — in a flexible opt-in model — would be up to them. How the results of these assessments are used would be at the discretion of the HEI.

Using these tests will be a means of reflecting on and improving the HEI programmes and their designs. As such - at this stage - these tests will not be linked to certification or progression and should not be punitive to students (though certainly we are trying to improve the quality of what students are offered).

There will be three sets of written assessment instruments: (1) Mathematics; (2) English and (3) Language and literature in home languages (other than English). For each set there will be a diagnostic form (for use in the 1st year of the B.Ed. and a summative form for the 4th year of the B.Ed.). Each of these two forms of the test will have anchor questions to allow for comparison between the two instruments.

Each assessment will be in written test format designed to fit into a double lecture/test slot at an HEI (so an estimate of a one hour written paper). The test must be easy to administer and mark and to make this possible we would like most of the questions to be MCQ/closed questions. There is space for open questions (as these are necessary especially for writing, reasoning and argument/proof) but these should be kept to a minimum. Ultimately this may become an online assessment, and clever use of closed questions is therefore important (and for standardisation of marking). In the long term an item bank of questions is needed so that the test is not predictable.

#### What the Assessment group needs from the other working groups

Each workgroup is asked to send in items for inclusion in a written test (one for Literacy (home language, one for FAL, one for Mathematics, at Foundation level but possibly also for a test at Intermediate level, for trainee teachers near the outset (in first year of their studies). The items would need to clearly relate to the standards, the Phase, and have a range of difficulty and type of question.

The same as above but for tests to be used near the exit (fourth year in the B.Ed.). These tests could include a task of reflection on the marking of an example of a learner task.

Also to be submitted would be materials and guidelines on ways of reflecting on teaching competence as evident through WIL (and hence requiring engagement with the WIL working group (CCWG3). This could include reflection on their marking of a real learner tasks, portfolios of pre-assessment and assessment, action research tasks, etc.

The B.Ed. coordinators and/or course coordinators for mathematics and language/literacy should be involved in the administration and marking of common assessment trials.

#### **Timelines**

#### Assessing overall competence

The Assessment Working Group wants to immediately start the process of collaborating on common assessments. It is recognised that the other working groups will not have developed their standards and curriculum and assessment frameworks immediately — but the assessment standards and the common assessment instruments will improved and refined over time.

The current plan is to have the diagnostic set of assessments (comprising a Mathematics paper; an English language and literacy paper, and an isiXhosa language and literacy paper) administered near the outset of the B.Ed. in May 2017 piloted at about four HEIs (probably Wits, Johannesburg, Tshwane and an Eastern Cape Institution).

The second set of summative assessments (again comprising a Mathematics paper, an English language and literacy paper and an African language and literacy paper) will be designed for use near the endpoint of the B.Ed. This will be designed for use in the fourth year in the second semester (or third quarter) to allow some time for intervention prior to students leaving the B.Ed. The first trial of the near endpoint assessment will be in the second semester of 2018.

Having the tests in an online format (which would be useful in that it would reduce the administration and marking process for HEIs) is not considered viable at this early stage of development.

#### A general issue - ethical clearance

It is clear that ethical clearance will be needed for trialing and reporting on assessments conducted with 1st and 4th year B.Ed. students as part of CCWG2's work with common assessments of educator competence.

It is less clear to what extent ethical clearance is needed for what is essentially a document collection process being undertaken by the Consolidated Literacy Working Group in their audit of language and literacy courses being offered at HEIs.

#### Requests from working groups

#### **CCWG2** Assessment

Do you have any suggestions for us on another colleagues in the language/literacy field who could join us? Could we persuade you to come into this?

The assessment workstream is going to have to draw heavily on the other work groups for standards and assessment items related to their particular field. These have to be designed and then administered, marked and reported on. The assessment working group is then going to have to glue together what comes from the others, so that we have an assessment framework (against the standards) and some shared assessments which have been trialled, administered, marked and reflected up.

#### Requests to working groups

Although the issue of ethical clearance is going to be complicated by the complexity of a number of working groups working on collaborative projects, it is important that members of working groups start applying for ethical clearance for the research and development work about to be undertaken. An obvious example of this is the need to bet permission to trial and report of assessments of students in relation to the work of Assessment Working Group.

The PrimTEd Project is a component of the Department of Higher Education and Training's Teaching and Learning Development Capacity Improvement Programme (TLDCIP), and as such is under the overall authority of the DHET's Director-General. The PrimTEd Project is managed by the Chief Directorate for Teaching and Learning Development, located in the University Education branch of the DHET.

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