

May 2017

PrimTEd







National Working Committee

The National Working Committee met on 11 April to hear reports on progress from the working groups and from the Department of Higher Education and Training.

From the DHET side there was confidence that the overarching TLD-CIP programme was well under way and that the PrimTEd budgets for the next phase of the project would be approved soon - it was acknowledged that the budgeting process had been difficult. The whole programme was very important to the DHET and a Director had been appointed to manage it, as well as a Deputy Director (Michele Mathey and Precious Sipuka respectively).

The JET Educational Services management team also reported.

In discussion, the stresses related to the project was discussed. As the project relied essentially on voluntary effort, the current university context with an increase in university demands on staff led to stress and burn out – as one academic stated it, "Passion leads to lala land and then reality bites and we become resentful – there has been no let up of university demands on us and this is a big project."

The DHET agreed to do what it could to provide support, communicate with Deans of Education, and increase publicity for the project and the collaboration of parties in the different fora such as the South African Council for Educators (SACE). Coordination would be strengthened.

Working groups were encouraged to have their members attend other working group meetings. The more real engagement there was the more the likelihood of the PrimTEd aims being taken up into real change in the institutions.



representatives at the workshop were given sets of these resources. They will also soon be made available on the non-open access part of the PrimTEd website



WORK GROUP NEWS Mathematics Work Groups The Foundation Phase Mathematics Workshop

Often great education materials development projects do their work, produce the goods and the products sit in lonely splendour on the bookshelves of the commissioning government department or funding agency. One of the aims of the PrimTEd project is not to redo what has been done already and to make use of already created resources.

A well-attended Foundation Phase Mathematics Workshop workshop, held on 14 to 15 February at Birchwood Conference Centre in Boksburg, was a great attempt to address this issue. Ably led by Mike Askew and Francis Faller and others, the workshop was precisely about showcasing two Mathematics Development Projects and to ensure that HEIs and people working in the Mathematics working groups of PrimTEd had access to their materials. They were part of the Department of Higher Education and Training's "Strengthening Foundation Phase Teacher Education Programme".

The first project, as explained by Mike Askew and the Wits production team, was a series of 14 video programmes for use in initial teacher training. Ten of the videos are on fundamental numeracy skills. One is on Grade R, a couple are on reading stories, and one is more general on the teaching of literacy in the Foundation Phase. They were produced by the University of the Witwatersrand School of Education with European Union funding managed by the Department of Higher Education and Training. The video materials can be freely used by the HEIs and their students but may not be uploaded to YouTube or any public website. Print materials, also on disk, may, however, be freely copied.

HEI representatives at the workshop were given sets of these resources. They will also soon be made available on the non-open access part of the PrimTEd website. The second project, presented by Cally Kuhne and Cosmas Tambara, was done by the Cape Peninsula University of Technology with the same EU and DHET support. It developed a mathematics guide for teacher education Teaching Early Mathematics which focusses on the trajectory from Grade R to Grade 1. The materials include a substantial Mathematics Guide and accompanying video clips. The is openly accessible to all. All these resources will be available on the PrimTEd website (once it is operational).



The concern of the group is that students are assisting to develop skills to truly understand and discover maths, rather than just being given, for example, a geometry theorem and be told to complete examples on it. Criteria need to be developed which specify the evidence that students have mastered this component in their teaching.



Work Group 2 (WG2): Number sense

There has been good response from universities with 11 institutions from three regions (North, East and West). Each institution has provided critical readings around numbers sense and a systemic literature review will be produced to develop a common understanding of number sense and develop a framework for analysis of the curriculum. Parallel to this will be five case studies at HEI institutions operating in different contexts.

Future work will include development of common core standards, assessments and an assessment framework, and materials.

Work Group 3 (WG3): Shape, Space and Measurement

A desktop review has been undertaken on the place of geometry in B.Ed. programmes and on pedagogical content knowledge in the search for understanding how we present the big ideas in geometry in the context of the CAPs prescribed school maths curriculum. The universities were bypassed in the creation of CAPS because they had such a diversity of content covered in their teacher training courses. The group will move on to developing a set of core standards, assessment tools and some teaching units and materials, including a guide for mentors.

Work Group 4 (WG4): Mathematical thinking

This group has also involved 11 HEIs working in provincial/regional teams and a communications infrastructure set up using a Google drive and Skype. An initial analytical framework has been set up. The concern of the group is that students are assisting to develop skills to truly understand and discover maths, rather than just being given, for example, a geometry theorem and be told to complete examples on it. Criteria need to be developed which specify the evidence that students have mastered this component in their teaching.

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

Work continued on the annotated bibliographies and literature reviews started in 2016 and a start was made on looking at the competency standards of literacy teachers. The attempts to conduct an audit of Higher Education Institutions made slow progress, mainly because of the disruptions and after effects of the Fees Must Fall unrest. Initial interviews and data suggest that there is great variation in what is done by way of teaching the students about literacy and reading. It will be kicking off with an audit of the B.Ed. Courses/modules currently used to teach language and literacy educators.

The project is committed to all its outputs being open source



RESEP

ZENÈX



The Allan Gray Orbis Foundation Endowment initiative

Luckily it was not only the mathematicians who had an important workshop. Literacy got a look in at the Allan Gray Orbis Foundation Endowment workshop later in February on Taking stock of distance learning interventions and materials aimed at Foundation Phase literacy teachers in South Africa.

Led by Dr Nic Spaull, who is heading a project funded by the Allan Gray Foundation to develop a modularised Reading for Meaning course for use in In-Service Teacher Education. This intervention is essentially that proposed in the concept note Teaching Reading (and Writing) in the Foundation Phase written by Elizabeth Pretorius, Mary-Jane Jackson, Veronica McKay, Sarah Murray and Nic Spaull and published by the Zenex Founadtion and the Research on Socio-Economic Policy unit of the University of Stellenbosch. This concept note and proposal essentially arose out of one of the early PrimTEd planning workshops in early 2015.

Presenters included people from universities (UNISA, Wits, UKZN), most already involved in PrimTEd and from the DBE and some NGOs (Mindset, Molteno, WordWorks) and essentially the meeting gave support to the idea of developing such a course.

Subsequently project participants met in Port Elizabeth at the end of April and set in motion the first stages of developing a course, initially in Xhosa. The project is committed to all its outputs being open source so this will mesh exceedingly well with the materials development phases of PrimTEd Consolidated Literacy Working group.









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

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.



Developing assessment instruments to assess developing competence of primary teacher education students and new primary teacher graduates.

Cross-Cutting Work Group 2 (CCWG2): Assessment

As with some of the other work groups a need has been identified of finding out what competencies the students have when they enter Initial Teacher Education programmes and to track them as they develop. Hence work has been done on the development of a maths and literacy baseline assessment, building on or adapting previous common or standardised assessments such as CAL and TIMSS.

An online maths assessment was piloted in April at the University of Johannesburg with about 250 first year students. The draft first year B.Ed assessment was put together by the maths team (with some consultation with the maths working groups) together with an assessment framework. The assessment framework outlines the key constructs being assessed, and provides a guide on how this will be reported on. Work is also being done on a reporting template for the test.

This online assessment is focusses on the mathematical knowledge required for teaching primary maths. Questions are limited to Multiple Choice Questions and single answers. This is mostly SMK, but there are some PCK questions too. The test items are also classified as Foundation or Intermediate Phase, by content area, and by difficulty level/cognitive demands.

This April trial went relatively smoothly. The process was conducted as part of the usual assessment practice, and the data limited to use by UJ though later it will be shared with the PrimTEd Assessment group for research and comparison purposes.

This draft instrument will be refined, based on trial data from different HEIs.In due course the test will be available to HEIs on the PrimTEd website. Being an online test no marking or printing has been budgeted for. HEIs which cannot use the online test, will be given a pdf file which they can print and then arrange for marking.

HEIs are invited to trial the draft first year maths assessment (preferably before 31 July 2017) and the Assessment Work Group will arrange for administration at the universities. Interest has already been expressed from the universities of Johannesburg, Witwatersrand, Tshwane University of Technology, and the University of Fort Hare.

The mathematical thinking work group have reported some interesting work on more complex assessment processes — also possibly to be done online, which they plan to trial.

Similarly the assessment tools and approaches developed in the Wor Integrated Learning group will be included into the toolkit of B.Ed common assessment instruments. As the maths work groups (number sense, geometry and mathematical thinking) and WIL work group make progress on defined standards and developing materials and assessment items, the 1st year assessment will be refined and influence the 4th year assessment design too.

The initial trail is just a start to the process, and the way of working and the assessment design will improve over time.

SAERA October 2017 Port Elizabeth

The Assessment Working Group is planning to have a a panel at the South African Educational Research Association (SAERA) focused on the PrimTEd first year mathematics assessment trials that take place with first year B.Ed students by 31 July. The idea is to focus on maths (first year diagnostic assessment) and report on:

- 1. What PrimTED is, and invite wider participation
- 2. The design of the first trial of the common maths assessment (design process, online and practical constraints, assessment framework)
- 3. Results from the first trial (from UJ perspective)

If other institutions would like to include a submission on their perspective and analysis of your first maths common assessment trial then they can propose a submission.

The Mathematical thinking group had some additional discussions about possible assessment techniques for more complex maths processes. This component (at least the thinking behind it) could be included in the proposed SAERA assessment panel. Similarly if there are WIL approaches emerging about maths they could also submit a proposal. SAERA is really a space to share ideas with the wider education community. It makes sense to do this within the existing Assessment SIG. There is potential to then build on what is done in the papers for this SAERA panel, into a journal article (s). The idea is that data from individual institutions can be used by colleagues from those institutions to author papers, and that cross cutting / cross institutional issues (such as design or comparisons across institutions) can be agreed within the work groups.

Open access articles for primary maths teachers

Lynn Bowie and Hamsa Venkatakrishnan have collated a series of articles they wrote for **The Teacher** magazine into a booklet. The booklet is available as an open source download on the University of Witwatersrand website at : <u>https://www.wits.</u> <u>ac.za/media/wits-university/faculties-and-schools/humanities/wits-school-of-education/research-entities/maths-connect/ documents/mag.compressed.pdf</u>



Work-Integrated Learning: Developing models and tools to support enable effective workintegrated learning in primary teacher education students in the areas of literacy/languages and mathematics teaching.

Cross-Cutting Work Group 3 (CCWG3): Work Integrated Learning

The Work Integrated Learning Group's Coordinator, Professor Carisma Nel, as a Research Professor has been able to dedicate time to this project.

The Group is currently exploring Information Technology platforms, is working on a WIL definition and literature review and has been examining the (edTPA) instrument from Stanford University. The edTPA is a new student teacher performance assessment developed by the Stanford Center for Assessment, Learning and Equity (SCALE). It is being used experimentally in more than 30 states in the USA. The group is also looking at observation protocols – should they relate only to disciplinary knowledge or every-thing in the experience

The group is concerned that there is also a need to change the practice of poor quality in-service teachers and providing mentorship for them. The group has noted problematic stakeholders and their sites and the need to avoid the false assumption that we can just go into schools – school don't want they see as disruptive projects.

Another issue is what HEIs are doing to ensure the alignment between what students do in their course work and what they do in their practice teaching.

What about Life skills?

Busisiwe Alant from University of KwaZulu-Natal has asked why Life Skills cannot have a PrimTed work group too and has provided an link to a paper on their Design and Technology work in the Foundation Phase that show how drawing and design have implications for the other Foundation Phase areas.

http://www.tandfonline.com/eprint/sAqAhqKUc9ehdw4wQExu/full

DHET News

Michelle Mathey has been appointed as Director for the Teaching and Learning Development Capacity Improvement Programme (TLDCIP) of which PrimTEd is one project.

Michelle Mathey's career in education spans 29 years. She starting as a secondary school teacher and Head of Department in Pietermaritzburg, then moved to the University of KwaZulu Natal, where she lectured in pre and post school teacher education. It was at this point that Michelle's interest in rural school improvement was ignited leading to her appointment as a School Improvement Specialist at JET Education Services and then as Executive Manager of the School Improvement Division, a position she held for three years. Michelle's appointment as the Programme Manager of the Varsity College School of Education (Gauteng) took her into the private education sphere. The lure of public teacher education resulted in her appointment in May 2017 to the Department of Higher Education post.

We look forward to the contribution she will make to ensuring that the programme is managed effectively towards the achievement of all of its objectives.

Please direct all DHET related PrimTEd communications, requests for assistance and so on through Michelle.

Her email address is Mathey.m@dhet.gov.za

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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