An inter-province study of language and literacy paradigms and practices in Foundation Phase classrooms in Limpopo and Gauteng

Authors:

Prinsloo, C.H.[*], Ramani, E.,[*] Joseph, M.[**],

Rogers, S.[**/***], Mashatole, A.[***], Lafon, M.[**] and Webb V.[*]

(with Mathekga, P., Mphahlele, T., Mokolo, F.,
Somo, L., Tlowane, M., Bopape, S. and Morapedi, M.)[****]

NRF Grant No: 74009
Reference: ESA20100802000014533
Short title: Paradigms of language teaching
Programme: Knowledge Fields – Education Research in South Africa
Research and Innovation Support and Advancement (RISA)

This work is based upon research supported by the National Research Foundation (NRF). Any opinion, findings and conclusions or recommendations expressed in this material are those of the authors and therefore the NRF do not accept any liability in regard thereto.

* Principal Investigator and Co-Investigators
** Expanded Project Committee; main Partners
*** Student authors / **** Other student collaborators

Table of Contents

List of Tables, Figures and Transcripts

Tables

Figures

Transcripts

List of Acronyms

ANA	Annual National Assessment
BICS	Basic Interpersonal Communication Skills
CALP	Cognitive Academic Language Proficiency
CAPS	Curriculum and Assessment Policy Statement/s
CEMS (BA)	Contemporary English and Multilingual Studies course (BA)
CentRePoL	Centre for Research on the Politics of Language (at UP)
CHAT	Cultural-Historical Activity Theory
CHT	Cultural-Historical Theory
CLIL	Content and Language Integrated Learning
CNRS	National Centre for Scientific Research (France)
COS	Central Operating System
DBE	Department of Basic Education
DoE	Department of Education
EE	Economics of Education
EFAL	English First Additional Language
ESD	Education and Skills Development (Research Programme)
ESL	English Second Language
FAL	First Additional Language
FP	Foundation Phase
GDE	Gauteng Department of Education
GPLMS	Gauteng Primary Language and Mathematics Strategy
GPLNS	Gauteng Primary Literacy and Numeracy Strategy
GPLS	Gauteng Primary Literacy Strategy
HoD	Head of Department
HL	Home Language
HSRC	Human Sciences Research Council
IFAS	French Institute of South Africa
IIALP	Incremental Introduction of African Languages Policy
I-R-F	Initiation-Response-Feedback (interaction analysis)
IKS	Indigenous Knowledge Systems
L1	First language
L2	Second language
LAC	Language Across the Curriculum
LiEP	Language in Education Policy
LoLT	Language of Learning and Teaching
LS	Language as Subject
LTSM	Learning and Teaching Support Material/s
MoI	Medium of Instruction
MTBBE	Mother-tongue-based bilingual education
NCS	National Curriculum Statement/s
NGO	Non-Government Organisation
NSES	National School Effectiveness Study
OBE	Outcomes-Based Education

PGCE	Post-Graduate Certificate in Education
PIRLS	Progress in International Literacy Study
PISA	Programme for International Student Assessment
RISA	Research and Innovation Support and Advancement programme
SABE	South African Black English
SACMEQ	Southern and Eastern African Consortium for Monitoring Education Quality
SANPAD	South Africa Netherlands Research Programme on Alternatives in Development
SER	School Effectiveness Research
SFE	Straight For English
SGB	School Governing Body
SLA	Second-Language Acquisition
TIMSS	Trends in International Mathematics and Science Study
UL	University of Limpopo
UP	University of Pretoria
ZPD	Zone of proximal development

Acknowledgements

The research team, especially myself (Dr Cas Prinsloo, who served as Principal Investigator), is indebted to the many organisations and individuals without whose contributions and participation the study and this report would not have been possible. The following acknowledgements are made in particular:

The National Research Foundation (NRF), for the research and student grants and related administrative support, particularly in relation to annually submitting progress reports, registering new students, etc.

The home institutions within which the various investigators, partners and collaborators worked:

- The Department of Basic Education in Gauteng and Limpopo, for providing permission for the study, including those officials helping us to contextualise the work within the curriculum, language policy and other related dynamics and structures.
- The Universities of Limpopo (UL), Pretoria (UP) and Witwatersrand, in particular their heads of faculties/departments for allowing their staff and students to work on the study, as well as their research offices for processing the adminstative and financial activities behind the study.
- The Human Sciences Research Council (HSRC), for accommodating the study and all its project administration, especially the Education and Skills Development (ESD) Research Programme led by Dr Vijay Reddy as Executive Director, the HSRC's Research Administation Office for processing the official financial and related management activities, and Ms Elmi de Koning, Ms Matselane Maja and Ms Erika Masser who were our able programme, project and general administrators, respectively.
- The French Institute of South Africa, and CNRS, for making it possible, through the necessary permissions and any relevant material support, for Dr Lafon to have been part of the study.

The two Co-Investigators of the study, Prof Esther Ramani (UL) and Prof Vic Webb (UP), for their unflinching, enthusiastic and supportive co-management of the study, intellectually and operationally.

All the other research partners, regular and incidental collaborators, and members of the project steering committee who kept all the thoughts and activities together. They and their roles are acknowledged at various other places such as the authors' list, footnotes, annexures and elsewhere in the text.

The co-authors, in particular Prof Esther Ramani, Prof Michael Joseph and Ms Shawn Rogers for their share in the writing, but also all others having contributed smaller, but no less important, pieces of writing.

The many participants in the regular working seminars every semester, and all the other working meetings in between, centrally and in each region.

The two readers of the manuscript, Prof Lilli Pretorius and Ms Margie Owen-Smith, for their invaluable inputs towards improving the final product. They are absolved from any flaws, omissions or deliberate outcomes that remain, which are the result of decisions made by the authors.

The post-graduate students, for their enthusiastic and committed participation in seminars, working meetings, research activities and writing for parts of the report. We trust you appreciate exposure to a study of this kind, with all its scholarly and operational dynamics, as much as we as senior team members appreciate your valued contributioins and have enjoyed seeing you grow.

All the school management and governing body members giving us access to your schools, and last, but foremost, all the learners and their parents, teachers, principals or their deputies who participated in the study by allowing us into their classrooms and lives in order to collect the "reseach data".

Executive Summary

Informal conversations, scholarly debates, research reports, academic journal articles and books have been dealing increasingly with reading teaching and with literacy and language acquisition and development. The conceptual and theoretical positions underlying these activities and the findings from empirical work on the complex and critical issues related to the topic have taken centre stage. These materials and activities are considered important in relation to solutions to the problem of ongoing dismal learner achievement levels in South African education, which have burgeoned in the most recent half a decade. They also reflect international developments in relation to language as key factor in education, including a strong focus on the value of bi-/multilingualism for cognitive development. The study covered by this report happened within this broader global context, but also had many unique features. One of them is not having focused exclusively on bilingualism, although the topic featured in some ways by virtue of the nature of South Africa's language (-in-) education policy situation. Another is that the study foregrounded in-depth qualitative investigation as design feature. This component, with other methodological elements, is overviewed very briefly below. In the final instance, the terms and related requirements of NRF grants steered the study's scope and focus uniquely too.

Origins of the study

The foregoing statements introduce language practice in the school classroom as the research problem that needed to be studied. This decision came about in a number of integrated ways. The NRF's research call from their Knowledge Fields Development initiative was in many ways the culmination of a much broader research prioritisation impetus that preceded it. It also involved a number of position papers and a series of stakeholder meetings in the form of a roadshow in relation to education research. One of the salient topics throughout was literacy and language teaching and learning. The NRF grant call provided an opportunity, also through a seed-grant or consortium-formation and proposal-writing phase, to put together a multidisciplinary, multi-institutional research project. Such projects also provided the opportunity to develop research capacity not only at formerly disadvantaged rural universities, but through strong post-graduate student-support. Without providing any detail – it appears in the complete report – brief indications of the research problem and objectives formulated for the study are provided next.

Research problem

Teacher-learner interaction in language classrooms, that is, during language lessons, does not equip our learners with sufficient language and literacy skills. This outcome is perceived to reach crisis proportions already after four to five years of formal schooling. It seriously compromises the foundational and academic skills that learners need for mastering all their subsequent learning and for achieving their potential in life. Along with other consequences related to the development milestones that children had or had not mastered in the first five or six years of their lives, such as low birthweight, stunted growth, parasitic infections and undetected hearing problems, Foundation Phase (Grade (R)1-3) deficits are carried into the remainder of learners' school lives.

In addition to home-language development and literacy, second-language acquisition and development was an important issue. Many unanswered questions prevail in relation to how current language policies and practices in schools determine learning outcomes. Prominent elements include how and when language subjects are taught, and the interrelations between first additional languages and first or home languages.

In a nutshell, we do not know enough about the effect over time of the (mis)alignment of: (i) the theoretical and conceptual foundations (paradigms) of language teaching, on the one hand, which would include aspects of teacher training with regard to their pedagogical skills and the didactics of language teaching; and (ii) the practical dimensions of classroom interaction, on the other hand, which include matters related to the contents and use of textbooks (and readers) and other learning materials; on learning outcomes, or the short- and longer-term success of learners in, and based on, sound language and literacy acquisition and development. The foregoing matters are situated in alarmingly low learner achievement levels already at Grade 3 level in subjects across the curriculum but also literacy and language. It also precedes the obligatory switch by learners from the use of an African home language as medium of instruction to that of another language, mostly English, as first additional language, for official learning and teaching. Both these (sets of) languages are taught with variable success as subjects during the Foundation Phase. However, the second language must become the vehicle or toolkit for all further learning. In the process insufficient attention is paid to the development of cognitive academic language proficiency.

A related methodological gap was the uncertainty about what a so-called "literacy event" should be defined as. Further dimensions of the research problem related to the availability and optimal use of learning and teaching support material, the effect of compromised first-language development, the relation between second-language acquisition and conceptual development, the use made of assessment for learning, difficulties associated with establishing a culture of reading (or reading for pleasure), and over-generalising the nature of the problem as invariant across languages, grades, provinces and school location (urban and rural). The rationale for the study is provided and expanded on in Section 2.2.

Research objectives

The overall aim of the study was to determine the effect of the relation between language acquisition and development paradigms (approaches) and daily teaching and learning classroom practices (interactions) on learners' actual language and literacy development (or achievement). Specific research questions were if and how paradigms and practices interacted, and how and why such interactions determined language learning outcomes. These objectives were pursued through a three-phase project structure. Phase I (roughly Year 1) had the main objective of contributing critically to the development of conceptual and theoretical foundations that could explain and underpin the rest of the study on language and teaching interaction, and the collection and analysis of its data. An important component of this objective was to identify and define the "literacy event" during which learners actually engage with "text" and achieve literacy development. During Phase II interactive seminars, based on provisional data collection and analysis, underpinned critical debate and preparation for Phase III. It in essence entailed exploring how/which conceptual models would be useful to underpin our classroom interaction research and analysis. During Phase III the team undertook specific final empirical work on the basis of the by-now contextualised, innovative and operationally coherent suite of empirical sub-studies.

Relating teaching paradigms and practices to one another was approached and implemented not only as an analysis strategy, but leading up to that, as methodology-refinement process in the first stages of the project. Also, not only conventional, "objective" or neutral collection of observational or empirical data would satisfy the objectives of the study, but the Limpopo team, as part of their approach and some of their empirical work, engaged in intervention research. This entailed making use of "demonstration lessons" that would suggest to teachers "improved" ways of teaching language and literacy, followed by focus-group discussions on the effect that such an approach had on these regular teachers, or could have in the wider system.

Literature, theoretical and conceptual frameworks

Special attempts were made to document a strong selection of classic and modern literature on paradigms and concepts, and language teaching and learning practices in the classroom, as encountered right through the study. A wide array of material across schools of thought are amply cited and referenced as a result throughout the study, and no further reference is made to literature now. The conceptual framework selected for use in analysing the data and reporting on the findings is overviewed further down.

Methodology and design

A qualitative approach was necessary in order to get an in-depth understanding of language teaching and learning dynamics in both regular and intervention classroom lessons. The main unit of analysis, as a result, was the "literacy event", as already introduced above. This, in terms of the data collection and analysis, consisted in selected observations where teacher/s and learners engaged with written language.

Sample and participants

These abovementioned "pieces of engagement with writing" during language lessons were selected from a range of lesson observations spread over Grade 1 to 3 language classes from Gauteng and Limpopo primary schools. First (L1) and second (L2) languages were both included. Details comprising the numbers of lessons observed across grade, subject and province, with further accompanying information, appear in Chapter 5 (Table 5.1 and Table 5.4). Regular language lessons, taught by the classes' own teachers, were observed in both Gauteng and Limpopo. Intervention lessons were conducted and observed only in Limpopo. In the process, lessons in isiZulu (Gauteng only), Sepedi, English and Numeracy (Limpopo only) were observed across Grades 1 to 3.

By implication, the teachers and learners whose lessons (teaching and learning interactions) were observed, comprised the participants of the study. The principals of these schools, and in a few cases deputy-principals or heads of department, also participated to provide some information to contextualise the lesson observations.

To summarise, for the Limpopo sub-study, the Limpopo sub-team visited one school during February and March 2013. Seven regular teaching sessions were observed at this school on 5 and 6 February 2013. Six additional lessons were observed on 4 and 5 March 2013 during which two research-team members conducted "intervention teaching" (see Sections 4.4 and 5.1 for more information about this). These schools were village or rural schools in the area around Polokwane and the Limpopo University. In Gauteng, five lesson observations were conducted in three schools. These schools were from two large township areas; Mamelodi to the east of Pretoria, and Soweto to the south-west of Johannesburg. A more detailed overview of these lesson observations in Limpopo and Gauteng, respectively, is provided in Sections 5.1 and 5.2. In Limpopo, three teachers and two researchers conducted lessons with three different classes. In Gauteng, five different teachers conducted lessons with five different classes from three schools. The first two observations took place at one school on 14 November 2011. The third observation occurred at a second school on 23 April 2012. The final two lesson observations were on 6 and 24 August 2012 at a third school.

Instruments

The main instrument was the video and sound recordings of footage made of the selected lesson observations using video-camera equipment. The footage was transcribed verbatim afterwards. When lessons had not been in English, but Sepedi or isiZulu, the transcriptions were also translated verbatim into

English. The translations were done by two different language lecturers from the University of Pretoria. These translations were also provided with a column indicating the parallel non-verbal behaviour accompanying all utterances.

Background information was collected through structured interviews with all teachers whose lessons were observed. Teachers were also debriefed about the findings from preliminary analysis of the footage, shown their footage, and handed copies of these for use in their own professional development, as they saw fit, as part of a debriefing and verification process.

The Limpopo teachers that had observed the intervention lessons which had been presented either by one of the Limpopo teacher-training professors or one of her postgraduate teacher students, participated in a semi-structured focus-group discussion afterwards.

Some information was also collected initially about language use and factors in the relevant school communities from school principals and any deputy-principals or heads of department that the principals referred the team to.

Procedures

Data collection was planned for and introduced over a period during which contact was made with schools, principals and teachers, the needs of the study were introduced, school and provincial permission for the research was obtained, all the necessary research ethics requirements were set out and adhered to, and the relevant information sheets and consent forms were completed, before engaging any participants in data collection .This included drawing up a protocol for involving classes in video recordings.

Once all individual consent had been obtained, video footage was made on the selected days. Two cameras were used in all instances. One camera was in a static position, on a tripod, usually in one of the front corners of the class, often on or next to the teacher's desk. It had the ability to pan over the chalkboard and parts of the classroom. A priority was to follow the teacher and record all her key activities. The second camera was roving and hand-held. It focused on and zoomed in on what happened on the chalkboard, and on learners' responses to the teacher and what they were writing in their workbooks.

All video footage was then transcribed, as outlined above. Either individual utterances or turns taken by different participants were reflected as numbered rows in a table. These then served as the data, together with the records from teacher interviews and the focus-group discussion in Limpopo.

As pointed out, preliminary data analysis and conceptual framework refinement occurred in parallel at first, before final lesson-observation transcriptions were selected jointly and shared among sub-teams for analysis in line with each sub-team's approach, as reflected in detail in the report.

Analysis framework

Sub-teams agreed on and applied the analysis framework below, which was developed and agreed on during the first half of the study. However, some flexibility always remained in allowing sub-teams to select what they wanted to focus on and how to approach their analysis and reporting.

The three-way analysis model that was adopted for the empirical work of the project included:

- Classroom discourse analysis using the so-called I-R-F pattern (Initiation – Response - Feedback) established by Sinclair and Coulthard (1975).

- The level of cognitive challenge in teacher questions and the tasks designed by teachers (in relation to thinking and reasoning, inferential thinking and information processing), emphasised by scholars such as Barnes (1976), Cummins (1996) and Prabhu (1987).
- The conceptual (epistemological) gains made by learners (in relation to everyday and scientific / school knowledge) emphasised by scholars such as Bourdieu (1991), Bruner (1986), Hedegaard (1990) and Vygotsky (1987).

Key findings

Classroom observation and the close scrutiny of transcribed video and audio footage revealed a number of familiar and a few new, increasingly nuanced findings. Even in the case of findings that researchers by now have partly come to expect, the extent of the lack of innovative prospects among teachers was unexpectedly stark. The short summary below illustrates what is meant.

Teachers overwhelmingly depend on traditional methods of teaching characterised by repetition, rote learning and chorusing that have become all but meaningless. This can be described as an epistemological impoverishment of classroom engagements. Concurrent features of this are that interactions in classrooms are predominantly teacher-centred, pedagogic practices have become localised, they contribute little (epistemologically) to learners' understanding of concepts, learners are not developed meaningfully in relation to their literacy skills, reading is superficial and not meaning-making, and everyday knowledge and academic literacy skills are not connected with each other. In relation to home as well as additional languages, learning and teaching is at a level far below learners' linguistic and cognitive capacities. These outcomes could be explained by insufficient theoretical understanding of the learning process among teachers, perhaps partly because they have limited understanding of (and exposure to) current literature on learning and teaching.

Teachers' classroom practices show a predominance of safe-talk. This means that both teachers and learners find comfort in keeping within the known, and do not risk threats to their dignity by allowing "undesirable" kinds of interaction to happen in the classroom. Such interactions would be those that reveal that little or no learning has taken place. Contrary to the original hypothesis underpinning safe-talk, that is, that it manifests itself when a dominant language is forced upon second-language speakers, this study's observations showed that it also takes place in home-language lessons. This reinforces the view that safe-talk occurs when the level of required learner cognition is low and when teachers just aim to transmit knowledge without relying on learners' home-language oral and narrative proficiencies and skills. Therefore, teacher choices about teaching strategy, the kind of teacher questions they use and the nature of classroom engagements are seminal to safe-talk, for instance when learners are inundated with repetitions, rhythmic chants, singing and rote memorisations. This dynamic also transferred to the mastering of abstract (mathematical) concepts in the teaching of numeracy through the mother tongue.

Low-order cognition was the order of the day. This took place because teacher questions were predominantly centred on learners' abilities to list and mention things, suggesting that teachers struggle with engaging learners in more cognitively-demanding tasks such as reasoning, explaining, comparing and analysing.

There was a dominance of low-order literacy (reading and writing). In fact, the amount of writing observed was minimal. When learners wrote, it was mostly at word level, with a lack of extended writing. Such infrequent and inadequate exposure to writing has adverse effects on learners' ability to grasp writing as a mode of expression and a tool of symbolisation representing reality and meaning. This situation is

aggravated in the case of children from non-literate backgrounds, who are fully dependent upon the schooling system for literacy learning.

Teachers' inflexible interpretation of CAPS (Curriculum and Assessment Policy Statement/s) constitutes another key finding of the study. Many teachers also said that they had received insufficient training in CAPS. As a result the intention that CAPS should strengthen teachers' ability to teach content using learner workbooks, instead of doing mainly skills transfer, which Outcomes-Based Education (OBE) had been criticised for, did not come to fruition. Teachers actually became overwhelmingly rigid in completing the pre-set daily, weekly and quarterly activities and tasks. They concentrate on their instruction and learners' memorisation. They perceive CAPS as imposing a lot of pressure to complete scheduled activities within the stipulated time frame. Some of the teachers misinterpret CAPS as suggesting that they have to allocate time to every activity or task, after which teachers quickly move on, even though learners may not have understood or completed previous tasks. The foregoing is also partly based on a "one size fits all" notion in relation to learner abilities and teacher pacing. Another part of the explanation may lie in teacher training and materials development having become the venture of academic teacher trainers, somewhat out of touch with classroom realities and teacher perceptions and capabilities.

Teachers' inability to contextualise learning may also have resulted from a lack of essential training and knowledge. A number of bridging tasks by teachers go unexecuted. These include helping learners to connect explicitly their already existing knowledge frameworks and new knowledge, their home and additional languages (as subjects and instructional languages), oracy and literacy, and everyday knowledge and academic or disciplinary knowledge. Failure by teachers to adequately contextualise activities has far-reaching implications for learning and concept development, especially for learners with limited exposure to academic discourse.

Teachers were found to make ineffective use of various knowledge modalities in learner workbooks. For example, many teachers treated the pictures in workbooks as if they were not connected to the themes dealt with in the texts. Reading was treated as an independent exercise. As a result, learners were unable to engage meaningfully with texts, which are multimodal, and with other conventions of print. This further means that the overemphasis on the verbal elements of texts deprives learners of multimodal experiences they can learn from.

A set of unique findings is related to the **intervention lessons** undertaken as one of the components in the Limpopo part of the study. Valuable lessons were learned about activating learner agency. A particularly helpful strategy was introducing writing early in a lesson, and not as an add-on at the end. It countered the predominance of oracy. Regular texts from the workbooks, including their accompanying picture frames, for Grade 1 and Grade 3, were successfully used in developing writing tasks for learners. Key to its success was allowing learners control over how they encode information in writing using their own ideas and formulations. This approach also showed teachers that writing can be developed without having to change the materials. Learner agency and empowerment strongly featured, and also led to increased learner confidence, meaningful shaping of their own voices, concept development and understanding.

As already alluded to, bridging oracy and literacy was strongly demonstrated by engaging learners in age-appropriate and challenging exercises and writing tasks on the basis of picture stories and learner readings from their regular workbooks, still within the confines of the curriculum. Interactive writing practices were embedded in disciplinary knowledge.

Once teachers had been confronted with alternative practices through researchers' intervention teaching, the teachers were able to change their perceptions about and responses to alternative practices. This

occurred because the demonstrated alternative approaches stimulated a different kind of thinking among teachers about their classroom practices. It was based in particular on conveying the operational principle and belief of the intervention lesson that teachers can improve their knowledge and skills, not necessarily by following a particular methodological process (or expert theories), but rather with an enquiring attitude which allows them to find the most appropriate strategies in each situation. This kind of learning is situational, contextualised and personalised, allowing teachers mentally to construct this conceptual process according to their classroom needs. It also foregrounds self-awareness and a reflective approach. It is self-evident that the foregoing has much to say about the professional development, and initial teacher training, of teachers, including classroom management and assessment practices, for instance.

Implications of the research and its findings

The report, with the research activities and findings covered in it, calls for deepened debate between curriculum managers, language teachers, teacher trainers, researchers and parents on many remaining and some new issues. Part of the debate should be about the link between multilingualism and literacy / language development in South African schooling. Weak and strong models of multilingualism should be debated and their limitations addressed. Weak multilingualism involves the separation of language from cognition and content. Strong multilingualism comprises the integration of language, cognition, content, culture and identity. Good working practices about the appropriate role and value of elements such as phonics and approaches such as the communicative or whole-language approach should be identified and established.

A confirmation with a far-reaching implication for how language learning and teaching is going to be structured in future is that the use of home language as medium of instruction does not automatically guarantee quality instruction. For meaningful learning and teaching to take place, teachers need a resolute understanding of pedagogic and subject/content matter in order to engage their learners conceptually. The prevalence of safe-talk in the mother tongue content and language lessons is testimony to this reality.

Teachers' inflexibly and deterministic interpretation in relation to the curriculum (CAPS) cannot be allowed to continue unless we're prepared to accept the sacrifices that learners will continue to make by not doing cognitively-challenging tasks that require thinking skills. For teacher proficiency and training, this implication translates into requiring an end to poor pedagogic content knowledge among teachers. Otherwise, learners may remain at the level of everyday knowledge and BICS (basic interpersonal communication skills), with its ritualistic practices, without being taken towards CALP (cognitive academic language proficiency) and a high level of proficiency.

Teachers are trapped in the comfort zone of at most micro-level routines occurring by accident (e.g., shared reading) and a limited range of teacher-centred reading and writing strategies. If not addressed through innovative, learner-centred and situation-sensitive new motivations, understandings and practices, the current dominant teaching culture will just stay that and not become a systemic innovation. One main implication is that extended writing and its benefits of cognitive and conceptual development for learners will remain just a dream.

Without intervention and demonstration lessons, and teachers getting together in communities of practice to support their personal professional development, the benefits that the innovation component of the study demonstrated, will not materialise and permeate the system. Learners will also not become the confident agents of their own classroom destiny, find their own voice in the situation, and (be allowed to) take the initiative in much of their own learning. Co-constructed learning contents and making use of all language resources available to a classroom, especially those possessed by the learners, will also falter.

The cliché of research generating more questions than answers again implies that further Foundation Phase language and literacy studies need to be identified and conceptualised carefully, but urgently.

Key policy messages (recommendations)

In order to enhance language and literacy practices in Foundation Phase classrooms, a number of policy messages or recommendations are conveyed at the end of the report. These are summarised in closing.

There is a great need among teachers for CAPS-based support. The kind of support should integrate conceptual, pedagogic and content matter to ensure that teachers know exactly what to do in the classroom, and effectively deliver curricular ideas. The support can be in the form of regular training (pre-service training and ongoing professional development; see further below) and working or focus groups (communities of practice) among teachers themselves. The Department of Basic Education should initiate such support programmes, perhaps best located at district level.

The reading and writing practices that learners engage in, as guided by teachers, require an overhaul. Current practices where teachers do not show learners how to explore ideas in writing, thus depriving them of meaning-driven conceptual development, should be abandoned in favour of showing and allowing learners to view writing as an expressive medium for producing texts. A deepening of processing levels should accompany this, aimed in particular at achieving academic language proficiency and higher-order cognitive processing, among other things through extended writing and reading fluency with retention of meaning.

In relation to professional development, the problem of poor subject and pedagogic content knowledge on the part of teachers continues to be a critical one in urgent need of solving through major adjustments to teacher training and training resources and facilities. These have to include both central pre-service training facilities with a strong practical component and collegial, small-scale training facilities close to schools, grouped together for identifying common needs and finding common solutions.

Related to the previous recommendation, professional networks for teacher development should be pursued as better than the workshop approach, which has not succeeded in radically transforming the everyday practices of practising teachers. This suggests that there is a need for locale-specific initiatives where local schools and teachers link up with researchers and progressive thinkers located within higher education and non-government organisations (NGOs). Together they should progressively conceptualise alternatives to current problems impacting teaching and learning. It could involve researchers acting as teachers and actually entering classrooms as teachers, whose practice can stimulate critical reflection and theory revision.

Existing campaigns for creating a culture of reading or “reading for pleasure” should be well-resourced and strategically approached and implemented. They should complement reading-for-meaning / -knowledge approaches within both home and additional languages. It should not be forgotten that not every learner or adult becomes an avid or motivated reader, and that a 1:1 relationship does not exist, but rather a complex one, between such motivation and reading, on the one hand, and academic achievement or later success in life, on the other hand.

Among other topics requiring further research, it is suggested that current teaching and learning practice over the first four months of literacy acquisition in Grade 1 be prioritised. It is also recommended that an intensive, in-depth qualitative study be started with. Such a study should focus on tracking just three to six teachers on virtually a daily basis over these four to six months so that literacy teaching and learning, as implemented currently, can be understood in a few typical real-life situations. Such case studies could

include a Sepedi (Sotho-group), isiZulu (Nguni-group), (two) English (L1 and L2/FAL – first additional language) and (two) Afrikaans (L1 and L2/FAL, also as the second official language of learning and teaching (LoLT) after Gr 3) situation/s for comparative purposes, the ability to generalise discoveries more broadly, and the opportunity to learn from multiple perspectives.

Remaining gaps and limitations of the study

A range of topics and sub-themes could not be focused on strongly enough or be covered intensively enough in the study. A main explanation for this is that the nature and extent of the NRF funding-support model have placed some restrictions on what has been possible to undertake. For one, limited labour-cost coverage has been the result.

Accounting for curriculum coverage and type of school were not central features of the study, but may have brought additional clarity to the findings. Related themes or components that had to be dropped from a strong focus include oral learner assessment, the role of oracy for CALP, the role of reading folk tales and other genres, i.e. non-fiction, and a sharp and micro-detail focus on the literacy perspective.

Cohort or longitudinal perspectives are direly needed for studying the effects of teaching / teacher conduct on learner achievement and learning. Literacy acquisition in its micro-components over the first few months of Grade 1 may not have been foregrounded enough.

The construct “intervention” in research presupposes some level of activism, with the objective of activating change. In retrospect, a limitation of the study was the fact that it was not interested in “change as an end”, but rather in exploring the transformative processes that teachers undergo when they engage in critical reflections and discussions about their own teaching and the teaching of others. Also, in a more sustained teacher development model, the intervention interactions would have carried on for longer stretches of time. This would also have allowed much deeper engagement with the recorded lesson observations. As a result, it is difficult to judge whether teachers actually took up some of the intervention teaching practices and experimented with them further over a period of time.

Chapter One – Introduction

In this chapter, two dimensions of the origin of the study are described briefly. The first dimension is conceptual and relates to the research problem that the study set out to address. The other is procedural and describes the National Research Foundation (NRF) funding call and grant allocation process.

1.1 Origins of the study

The study reported here followed the approach laid down by the NRF's Research and Innovation Support and Advancement (RISA) programme. The approach had already integrated the funding call and its subsequent bid and granting process with the elements of research prioritisation.

1.1.1 Initial formulation of the problem statement

Broadly, NRF's support was targeted deliberately at studies of teaching and learning interaction from which knowledge and solutions would flow to improve education quality. In this, education was seen in its role as a national priority, because of its link to quality of life and economic development (eradicating poverty). More specific indications are provided in the remainder of Section 1.1 about the focus and approach of the present study in response to NRF's funding and its objectives.

The emerging research consortium decided early on to focus on the problems and solutions related to the quality of literacy and language acquisition and development in the early school years and gradually formulated its proposal more concretely. The final paragraph of Section 1.1.2 and Sections 1.2 and 1.3 can be consulted for more information on how NRF specifically solicited consortium projects by means of their funding call, the subsequent seed-money grant for preparing proposals and the eventual full research grant. The main consortium team members were specifically concerned about the following matters:

- The hegemony of English in South African society, and the concurrent neglect of and negative attitudes towards African languages, followed by their low status and use, as apparently symptomatic of a deep-seated crisis also affecting educational achievement.
- The large-scale failure of language teaching in the context of classroom practice, both with regard to first (L1) or home language and second language (L2, or first additional language - FAL), and the concomitant observation of deep anomalies between paradigms (theory) and practices in language classrooms.
- Anomalies about the handling of the language of learning and teaching (LoLT) or medium of instruction (MoI) in day-to-day teaching, but also between policy and its implementation.
- Avoiding and moving away from a deficit view in research, where problems have to be identified and scrutinised in order to avoid or overcome them in practice, instead of having a positive/innovative view of teaching and of doing research to enhance best practice.
- The pervasive observation of sterile and ritualistic "safe-talk" interaction between teacher and learners that perpetuate the impression that learning is taking place while it is not.

1.1.2 NRF funding call

A proposal call (framework document) was prepared and issued during June 2010 by NRF's Knowledge Fields Development directorate through its programme on Education Research in South Africa. It specified the beginning of a funding call cycle that would rely on a deliberate richness of disciplines, methodologies and partners. It was the result, furthermore, of a process that started already by 2009, with a "roadshow" that culminated in a set of six regional workshops during October/November 2009. As a result of this

process, a range of status-quo, research-audit, lessons-learnt and other concept- and position-paper documents provided fine detail about education research progress and priorities in South Africa. These documents served as context for direct requirements in the proposal call for consortia to be formed and for the submission of multidisciplinary and multi-institutional proposals. These consortia had to straddle at least three institutions, of which one had to be rural. This was the first signal of a strong capacity-development motive. In addition, grant funding would defray research-linked operational costs and grantholder-linked student support. The latter was the bigger portion, and was the second research capacity-development signal. In addition, a principal investigator and co-investigators had to be designated formally.

Provision was made for a two-stage application and two-tier grant-evaluation process. Seed-grant funding (up to R30 000) could be obtained within a month (July 2010) on the basis of a brief concept note for a two- to three-month period to help the prospective team members to put together a consortium and an extended proposal. This proposal was evaluated by postal reviewers and then adjudicated by an NRF panel. Awards were available from 1 January of 2011 for three years, given acceptable annual progress.

1.2 Seed grant towards forming a consortium and developing a proposal

As a result of individual networking and professional contact between colleagues across academic institutions and over many events, positive interest was gauged speedily in relation to a potential study. The working topic already then was “Paradigms and practices of language teaching and learning in Foundation Phase classrooms and their role in establishing a firm foundation for all further learning”. The provinces intended for participation were Gauteng and Limpopo.

The prospective consortium’s concept note emphasised how findings and information from preceding assessments, interventions and campaigns highlighted the low levels of learner academic achievement in South Africa. Specific such sources were the Progress in International Reading Literacy Study (PIRLS); the Trends in International Mathematics and Science Study (TIMSS); tests under the banner of the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ); Grade 3, 6 and 9 Systemic Evaluations; Grade 12 results; ongoing curriculum reform; and the Foundations of Literacy Campaign of the Department of Education. Reference was also made to strong evidence in support of the viewpoint that poor and delayed literacy and language proficiency exacerbated learners’ under-achievement. Furthermore, a decade and a half of school reform brought about limited improvements in classroom practice and learner performance. Optimal solutions were also still lacking with regard to the optimal blending of languages of teaching and learning and home languages, where they differed. Schools from disadvantaged and rural backgrounds struggled in particular to lure or retain the best teachers, avail themselves of sufficient learning and teaching support materials, and secure parental and community engagement.

The concept note offered a structured effort at evaluating the effectiveness of an array of literacy teaching events in classrooms with a view to inform education managers and policy about teacher capacity and training, pedagogy and didactics, teaching materials and the curriculum, facilities and support materials, as relevant. The intended benefits from the study were perceived to align well with Strategic Priority 4 (“Strengthen the skills and human resource base”) from the Presidency’s Medium-Term Strategic Framework of July 2009. The study would also be given an incremental character to allow flexibility and adjustments along the way as knowledge developed. Such envisaged areas, phases and sub-components, more or less aligned with the three years of proposed investigation, included: (i) conceptual paradigms and theoretical approaches and how they would inform not only the studied phenomena, but also the team’s own approach to its work; (ii) exploratory classroom observations to help scope the study, develop its

conceptual framework(s) and operationalise its constructs; and (iii) focused empirical investigation and benchmarking on the basis of the first two years of work and in preparation of possible future cohort work. Literature review and the application of any new awareness formed a deliberate part of all the work. The collaborating (research) institutions and their main roles were identified as the Human Sciences Research Council (HSRC) for project coordination and capacity development, the Centre for Research on the Politics of Language (CentRePol) of the University of Pretoria (UP) and the University of Limpopo (UL) for conceptualisation, empirical work and capacity development, and the Department of Basic Education in Limpopo for research support, other capacity development and access to schools and learning materials.

1.3 Proposal writing and final grant

On being granted this seed funding early in July 2010, the July/August period culminated in three work sessions, one in Limpopo and two in Gauteng, during late-July and early-August 2010 for the preparation of a full research proposal. A fourth meeting in Limpopo, between the lead investigators by the middle of August, served as final consultation to integrate the research themes and project ideas developed during the previous three sessions and to make arrangements about the completion and submission of the funding application. The proposal was compiled and submitted before the deadline at the end of August 2010 using the NRF Online system.

A highlight of this period was the involvement of many of the prospective post-graduate students during these sessions. They not only learned how such a process typically unfolded, but also about the intended field of study. What is more, they got trained for and started making their own research contributions.

The final proposal's contents are not elaborated on further here, as that forms the basis of the next section. The proposal was reviewed successfully and a funding award was made in November 2010. Once agreed to during December 2010, the work could start in 2011.

An important note has to be made here. The final award was about a third of the consortium's initial funding request. That had a significant impact on the scope of the study. On signing the acceptance conditions, the team in an annexure indicated the likely reductions of scope and other limitations due to the reduced funding. The project team would still attempt to go through all the key phases, but would cut down on sample size, the volume of data that would be collected and analysed, and the publications that would be feasible.

Another dimension that would affect the team was the fact that NRF funding was not to be used for labour costs related to any research team members from academic institutions. Such institutions are expected to carry the infrastructural and salary costs of academics involved in NRF research, or find additional funding. Solutions to this situation are easier to achieve at universities than at a science council. The remaining effect, however, was always one of over-extension of the lead investigators and other senior partners.

The final consortium leadership comprised Dr Cas Prinsloo from the HSRC as Principal Investigator and Proff Esther Ramani and Vic Webb, respectively from the Universities of Limpopo (School of Languages and Communication Studies) and Pretoria (Centre for Research on the Politics of Language), as Co-Investigators. Other senior partners and post-graduate students are listed and acknowledged elsewhere. Ms Onica Dederen served as the initial liaison person from the "client" organisation, DBE, in Limpopo.

Chapter Two – Background, research problem and questions, and aim and objectives of the study

Producing quality teaching and learning has been at a crossroads for a while. Put differently, evidence abounds about how the millions in funding spent on school and education reform have not produced the concomitant expected benefits in improved learner achievement (Barber & Mourshed, 2007; Mourshed, Chijioke & Barber, 2010). This is a global and local issue. Many of the broader explanations for the likely causes of poor learner achievement apply to the South African system as well. Without going into the wealth of studies on these factors, only selected comments are made about them below. We always deliberately return quickly to the part played by literacy and language, as the focus of this study. As a result, a few very brief citations are made next from the two reports already mentioned above, and from a good and rather timely overview very recently published locally by Taylor, Van der Berg and Mabogoane (2013b).

The "three-Ts" of textbooks, teacher competency and optimal time-use in classrooms were made prominent initially by Jansen (2005) as key causes of failure and as targets of intervention. The Department of Basic Education (DBE), in its previous structure as part of the Department of Education (DoE) and in many of its recent strategic discussions, forums and assessment reports, has often endorsed these points. When Taylor, Muller and Vinjevold (2003) released their thorough exposition of what would get schools working again locally, they emphasised the appropriate level of cognitive demand that should in addition be made upon learners in relation to expected work levels. In the wake of the foregoing, teachers were also the focus of the first McKinsey study (Barber & Mourshed, 2007). This report's conclusions centred around the right people becoming teachers, making them effective in their classroom instruction and affording such best possible teaching to every child in the system.

Taylor et al.'s (2003b) systemic and multi-level analysis and solutions also centred around acknowledgement of the role played by learner context, language factors, the curriculum (intentions, implementation and coverage), pedagogy or instructional expertise, evaluation and assessment, classroom factors, school management and organisation, and district support and monitoring, to name some essential elements. Mourshed et al. (2010) found and expect solid improvement where the existing contextual situation had been factored into a well-integrated set of interventions honed to fit the existing or status-quo level of functioning and achievement in a system. This dynamic also rests on sustainability measures and accounting for what would be required deliberately and consciously to energise or ignite reform at the outset. More follows on each of the five listed elements (as underscored).

Successful interventions have been tailored to the status quo of a school's stage of performance recovery, as it were. When starting on the journey from low baselines, students have to receive support in laying literacy and numeracy basics through support to teachers lacking the skills, having learners' essential needs fulfilled, and getting schools to function at a minimum-quality level. Once achievement levels approach the average, system foundations should be consolidated through producing good achievement data, achieving teacher and school accountability, and adopting sound financial, organisational and pedagogical models. Moving beyond average achievement levels, teacher and school leadership and professionalisation become paramount by attending to transparent human-resource practices and career paths. Once performance excellence is the case, schools take the place of central structures in the form of peer- and school-based learning in interaction with the wider system in search of further innovation. In addition to achieving such stage-based improvement plans and successes, interventions common to or across all performance stages include appropriate revision of the curriculum and standards, adopting a fair and logical remuneration and

reward structure (for teachers and principals), building educators' technical skills, doing sound learner assessment, creating the required data systems and introducing relevant policy documents and even legislation. Contextualising such interventions is all about obtaining the support of stakeholders, while finding the balance between internal motivation and external enforcement. Factors informing this balance are the pace of change required, the non-negotiability of an aspect of change, clearly-different sets of implications of those changing or not changing, and how credible and stable the situation is at the levels of leadership, the national government/department, historically and politically. Sustainability rests on internalised teaching practices. This happens best through collaboration between teachers within and across schools and between schools and the department, while valuing the development of continuous future leadership and the profession at large, preferably at a level somewhere between schools and the central authorities (for example, within cluster structures or subject-based interest groups). The impetus to overcome initial inertia and to ignite change is most likely going to originate from education being in crisis, high-salience critical reporting on systemic achievement, or visionary and energetic new strategic or political leadership. The latter factor is often the most important.

Taylor et al. (2013b) include the following potential explanations when considering the problems faced by our country in improving learner achievement: poorly run schools resulting in the low quality of basic education; poverty in the community; systemic failure in the civil service and its resulting lack of capacity; insufficient subject and subject pedagogical knowledge among teachers; inefficient use of teaching time and poor time management in relation to attendance, punctuality and curriculum coverage; weak and ineffective teacher classroom practices; absence of instructional leadership; and poorly developed systemic accountability. From the broader sections in their book as a whole, the authors' concerns that stand out relate to school management, decisions about and practices related to the language of learning and teaching, and teacher knowledge within a sound work culture and professional habitus. In addition, and again, the NRF-funded study's dual focus on language and on classroom teaching by teachers comes across as very timely and topical.

The NRF study can now, almost retrospectively at the stage of issuing its final report, take heart from many of the methodological, conceptual and theoretical considerations foregrounded by Taylor et al. (2013b) and how these underpinned their research report. Important acknowledgements are that studies of schooling quality and learner achievement have to accept the nested or hierarchical nature of the data, the importance of using multilevel and/or multivariate models, and the need to be grounded in strong conceptual and theoretical premises. An excellent review is also given of how two traditions of research have contributed over decades to our current knowledge. What is identified as school effectiveness research (SER), self-critically in as far as theoretical foundations, research design and policy contributions go, focused on identifying factors and processes explaining learning outcomes. What is identified as the economics of education (EE) tradition, rooted in production-function methods and economic theory, focused on principals and teachers as social actors responding to the structures and rules of accountability, management, compensation and sanction in operation within society at large.

Working with qualitative data and "approaches" should not serve to escape the requirements outlined in the first half of the previous paragraph. Bourdieu's (1983) work on cultural capital, and how schooling transmits that, is a case in point. So is Bernstein's explanation from 1990, as cited by Taylor et al. (2013b). According to Bernstein, learners acquire restricted and elaborate "codes", formed by culture, through which to make sense of their world by classifying experience and creating meaning or knowledge. Restricted codes function locally within the family and community, between peers and friends. Elaborate codes function outside specific contexts where principles, general classifications and rules operate as analytical structures. The critical implication in this regard is that learners have to grow up in families that

have reached middle-class status at least before they would be able to start decoding their world at home already by using elaborate codes. An example and also extension of the latter is that only children who learn to read well would develop the ability to master advanced content independently (for instance, as received from the teacher). Caro, Sandoval-Hernández and Lüdtke (2013) provide an excellent validation, as it were, by using complex modelling with large-scale quantitative data, of how research can extend our knowledge about what factors are associated with learner achievement to knowing why and how such factors achieve that. Their illustration was based on these constructs of cultural, social and economic capital.

The role played by the language of learning and teaching (LoLT) formed an important part of the National School Effectiveness Study (NSES) on which Vorster, Mayet and Taylor (2013) also reported. The "progression" in the school system from the release of our Language in Education Policy (LiEP) in 2006 to producing the Curriculum and Assessment Policy Statements (CAPS) in 2011 overlaps in many senses with the movement along the continuum from the fundamental policy of additive bilingualism to current straight-for-English (SFE) practices in urban areas, especially in Gauteng. Vorster *et al*. (2013) acknowledge that additive bilingualism, with its transition in Grade 4 to English as LoLT, still seem appropriate where relative language homogeneity prevails in relation to the African home language away from which the eventual transition will follow. However, they also call for considerable improvement and support in relation to its implementation. In this light, they offer recommendations about how to improve the teaching of English as first additional language (EFAL) in Grades 1 to 3, as well as in relation to the teaching proficiency of all language teachers in the Foundation Phase (FP). School management, knowledge resources (learning and teaching materials) and teaching practices are the main areas requiring such interventions. Teachers and learners should be helped in practical ways to smoothen the abrupt Grade 3 to Grade 4 transition. Classrooms should be provided with more and better reading materials in African home languages and English. The importance of reading and writing should be emphasised at all levels. All teacher training for primary school teachers should focus strongly on their language proficiency in African home languages and English. The teaching of English (i.e., EFAL) from Grade R needs to be strengthened. Community-level interventions need to be explored in this regard as well.

Besharati's (2014) report covering the findings from a multi-pronged analysis of the impact of mining investments in mainly Mathematics and Science interventions in public schools in Limpopo and North-West Provinces provides another confirmation of the importance of language for other and future learning. This study in all senses was an extended and comprehensive one. It reflected on the leverage produced by R100 million of corporate social investment funding over a period of four years (2009-2012). Its methodology and data comprised strong qualitative and quantitative components. Evaluation methods included the use of econometric modelling, meta-analysis and general quasi-experimental methodologies. Impact was evaluated and effectiveness measured by using regression analysis, difference-in-difference analysis and propensity score matching, always having an eye on a counterfactual situation that would predict what would have happened without the interventions. The key language-related finding was how achievement in English above a substantive level of excellence (i.e., passing the subject in Grade 12 with a mark of more than 50%) consistently was the strongest predictor of general (scoring above 30%) and excellent (scoring above 50%) pass marks in Grade 12 Mathematics and Physics. Standardised coefficients were in the order of 0,230 to 0,330, in one case double that of the next closest factor. At the conclusion of the present NRF-funded study of language teaching and learning the relevance of the stated knowledge, views and language issue remain as high as ever.

In view of these few opening comments and contextualisation above, we now present the research problem and questions, and subsequent aims and objectives of the present study, as they were formalised

at the outset at the time of the submission and acceptance of the funding proposal on which the present study has been based. For that purpose, relevant excerpts are made from those initial documents. It was acknowledged at the time (late in 2010) how the context of schooling shaped teaching and learning. Curriculum, assessment and language policy implementation have all indeed been shaped by the changes that occurred whilst the newly formed DBE was taking shape.

2.1 Problem identification

To which major problem/s in the area of school quality improvement did the study towards the end of 2010 and the beginning of 2011 set out seeking solutions? We summarise in this section how the matter was perceived at the outset, and still largely is, as things do not change overnight in a big schooling system. Many formulations were taken verbatim from the original funding proposal in the process.

Teacher-learner interaction in language classrooms, that is, during language lessons, does not equip our learners with sufficient language and literacy skills. This outcome is perceived to reach crisis proportions already after four to five years of formal schooling. It seriously compromises the foundational and academic skills that learners need for mastering all their subsequent learning and for achieving their potential in life.

Language acquisition and development is very complex. Much literature exists on the topic (e.g., Herschensohn, 2007; Hinkel, 2005; Kumaravadivelu, 2006; Larsen & Freeman, 2000; Ouane & Glanz, 2010; Richards & Rodgers, 2001; Wolf, 2007). An evident distinction separates first or home languages from second (and third or subsequent) languages in relation to how they are acquired and developed. Home language is by nature initially acquired orally through immersion in and around the home as mediated by parents, family and the immediate community. Where conditions are conducive, the child navigates through well-described critical periods and sequences of development towards mastery of the language. This process or achievement includes concept formation.

Being limited to formal schooling, the study could not in depth deal with pre-school “mother”-tongue acquisition / natural language acquisition. At stake there is basic oracy. It refers to mastering the listening (aural) and spoken (oral) parts of first-language usage, which mostly occurs before children go to school. It is accepted, though, that many consequences of what children had or had not achieved in the first five or six years of their lives are carried into their future school interactions. At the basis of the study is complete acceptance of the fundamental role of language in educational development (Silver & Lwin, 2014). This was accounted for in the study especially in the way that language relates to cognitive proficiencies.

Second-language acquisition and development was an important focus, in particular how current policies and practices in schools determine outcomes. Prominent dynamics included how and when such subjects are taught, typically as first additional language (FAL), but also as home language (HL). English is more widely used as FAL compared to Afrikaans. Either of them becomes the medium of instruction (MoI), official language of learning and teaching (LoLT), or language of choice, for learners during post-FP formal teaching and learning. The teaching of African languages as L1 was nevertheless also addressed and integrated into the study. Learners’ home languages include “mother” and/or “father” tongues - the languages declared by parents/guardians to be that of the child for the purpose of school - as initial MoIs during the FP, and also then and later as school subjects.

Structuring the grant as they had done, NRF helped the research community overcome key limitations that had existed before. Collaborators from different disciplines and theoretical orientations, in iterative, interactive consortium mode, could transcend former solitary efforts that often lacked clear and comprehensive understandings of how to demarcate and define a study’s unit of analysis or empirical data

event. (See further explanations later on the selection of the "literacy event" in this regard.) Such an approach would, and did, guide data collection better to reflect the classroom language teaching and learning "reality". It was also hoped that subsequent new or broader insights, by virtue of standing on expanded common ground, would fill important knowledge gaps across wider forums for critical interrogation. A part of this critical discussion would cover how successfully the diversity of theoretical and conceptual models had been able to meaningfully represent language teaching and learning "reality". This will now too inform the conceptualisation of follow-up studies, complete with improved information-collection modes, more solid conceptual and theoretical positions, and better selection and operationalisation of variables. We would also learn more in the process about contextual variables to account for. In the rest of this and the methodology chapter, the roles of collaborators are described more fully.

The information that accompanied the NRF call for proposals described the need for undertaking this and other related studies. That information was made available through presentations, discussions and integrative reports related to the research priority-setting road show and events of 2009, and studies commissioned by NRF on recent trends, gaps and current priorities in education research. The report by Deacon, Osman and Buchler (2009) is of particular note in terms of showing how more comprehensive and better integrated research, also in the crucial area of "language studies", was needed in South Africa. The "difficulties of learning – and also teaching – through the medium of a second language", in the context of outcomes-based education (OBE), continuous assessment and academic unpreparedness and development were emphasised in particular (p.21). Without citing any detail, the themes derived in Annexure C of the mentioned report on the basis of the sample of studies that their authors had reviewed, were very informative (pp.52-55). The themes reiterate the link between language and cognition, for instance, as well as communicative competence later in life. This baseline or foundational role of language requires further investigation because of its significance. The contents of these NRF materials were noted well, and formed the backdrop against which the proposed study unfolded. Key recommendations that guided the education research agenda were pursued and included: research not being comprehensive enough in terms of integration, multi-institutional participation, multi-year scope, and multi-disciplinary coverage; language teaching and learning and literacy development being a hugely important issue in multilingual contexts (from learner and teacher perspectives); and policy (i.e., LiEP) and practice being misaligned (the so-called *de iure* and *de facto* discrepancy).

Therefore, and this is the research problem in a nutshell, we do not know enough about the effect over time of the (mis)alignment of: (i) the theoretical and conceptual foundations (paradigms) of language teaching, on the one hand, which would include aspects of teacher training with regard to their pedagogical skills and didactics of language teaching; and (ii) practical dimensions of classroom interaction, on the other hand, which include matters related to the contents and use of textbooks (and readers) and other learning materials; on learning outcomes, or the short- and longer-term success of learners in, and based on, sound language and literacy acquisition and development.

In an overarching sense, the research problem described above and research questions detailed later are situated in broader issues. A first issue is that learner achievement levels are alarmingly low. This applies already at Grade 3 level. A specific concern is that it is true also for literacy and language. This concern becomes more serious when considering that learners switch from the African language used as MoI during FP to another language that will serve as LoLT in future, while both languages are taught with variable success as subjects during FP. However, the second language must become the vehicle or toolkit for all further learning. The second issue is that languages are not treated equitably in giving effect to the tenets and rights in the Constitution and in language-policy implementation. A third issue is the "vacuum" that

was felt among teachers and parents after the perceived demise of OBE and repeated curriculum discontinuities. Reasons likely to explain low learner performance were perceived to include: the fact that for many learners literacy development happens in a foreign language; the attitudes of teachers towards teaching African languages; parental communication abilities and patterns; and insufficient attention to the development of cognitive academic language proficiency (CALP).

A few further dimensions related to such an overarching perspective on the research problem are briefly listed next. One such dimension is the lack of clarity about the nature and absence of a precise definition of language learning and teaching interaction (the "literacy event", conceptually speaking) in classrooms. The quality of this "event" is also determined by the availability and use of learning and teaching support material and the contents and quality of teacher training practice. Stunted or compromised first-language development is a next dimension of the problem. Another comprises the relation between second-language acquisition and cognitive development when the second language becomes the MoI. "Assessment for learning" is another crucial element. This refers to non-formal, natural classroom interactions by means of which teachers determine learners' levels of mastery of the learning objectives and improve that through on-the-spot correction and feedback. The role played by an enhanced culture of reading, or reading for pleasure, is a final such component.

Oversimplifying the nature of the language teaching and learning reality to a singular or invariant situation is also part of the research problem. As a result, comparative perspectives were required in comparing language combinations and dynamics across rural and urban settings, and in the proximity of transitions into and out of the FP respectively from Grade R and towards Grade 4. For many learners the second transition coincides with a fundamental shift in language use in schools that use African languages as LoLT during FP.

We considered the research not only justified, but urgently needed, in order to rescue our country's children from mediocre language education and to help them secure later access to educational opportunities. We argued that we should prevent any further damage to the foundations (or toolkit) that learners require for mastering all their subsequent learning and becoming citizens that experience personal wellbeing and participate economically in valued activity (Cunha, Heckman, Lochner & Masterov, 2005; Heckman, 2000).

2.2 Rationale and motivation

In this section is reflected how it was argued that the problem/s outlined thus far could be solved provided that the collaborative research focused appropriately and in time on describing and studying the problem in the most feasible way. This would provide the underlying rationale not only for what the study aimed at and pursued as its more detailed objectives (provided in the sections to follow), but also how it would go about it. The latter is covered in Chapter 3, introducing the study's theoretical and conceptual foundations, and in Chapter 4, presenting its methodology and design features.

Many stakeholders worldwide continue to spend great effort at reforming education systems and schools and to improve learner achievement. Barber and Mourshed (2007), in what is popularly known as the first McKinsey report, released uncomfortable but telling evidence about how substantial increases in spending over three decades in 25 countries on reform have not yielded the intended improvements in learner performance. The world's top-10 performers were among these countries, as were some rapidly improving systems and selected developing economies from the Middle East and Latin America. Crucial factors in cases where school systems managed to improve learner performance consistently were found to be: getting the right people to become teachers; developing those teachers into effective instructors; and

ensuring that the system can deliver the best possible instruction to every child. These three points were very relevant in motivating the need for and conceptualisation of the present study.

Locally, Taylor (2007) argued that the public schooling system in South Africa in particular is not adding the required value. Low returns follow from high investments. Teacher quality and learner outcomes remain low despite expensive teacher capacity development through initial training and continuous professional development programmes. Classroom interaction again takes a central position. Fleisch (2004), Jansen (2005) and Taylor et al. (2003) confirm these arguments. Repeated curriculum change and the debate on curriculum content and quality (e.g., Bloch, 2009; Chisholm, 2004; Christie, Butler & Potterton, 2007) confirm the predicament of teaching and learning in South African schools, in particular in relation to the intensity of studies required and the urgency of solutions sought.

Reference has already been made to the preceding reviews, surveys and commissioned studies under the auspices of the NRF. These are not further elaborated on, except reiterating that they indicated comprehensive language studies as critical (Deacon et al., 2009).

Getting language teaching and learning interaction right in the classroom constituted a critical element at the origins of the present study. It would thus attempt to help alleviate the crisis proportions of poor learner achievement evident at the time from the local Grade 3 systemic evaluation (Department of Education, 2008a) and the international comparative reading literacy (PIRLS) reports (Howie, Venter, Van Staden, Zimmerman, Long, Scherman & Archer, 2007). In addition to those references that deal with language-teaching paradigms, that have been cited earlier, ample literature covers matters such as teaching and learning in multi- and bilingual classrooms, especially on the African continent and in South Africa. Such material provided a firm context for the study, and included: existing knowledge about the distinction between and roles of basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP) (Cummins, 1884, 1992); the findings from an evaluation of language-policy implementation and medium of instruction in Ethiopia (Heugh, Benson, Berhanu & Mekonnen, 2007); broader contextual factors and the policy environment (or the so-called *de facto* and *de iure* discrepancy) (Lafon, 2008; Webb, 2002, 2006a, 2006b, 2007; Webb & Du Plessis, 2006; Webb & Lafon, 2008; Webb, Deumert & Lepota, 2006; Webb, Lafon & Pare, 2010); and other discourses and practices in English Second Language (ESL) classrooms (Gibbons, 2006; Grin, 2005; Pretorius, 2008; Pretorius & Mokhwesana, 2009), in which the interactions between students, teachers and researchers were foregrounded in particular.

The research team was also familiar with the rationales, contents, thrusts and intended outcomes evident in various education strategies for developing language and literacy, such as those for Gauteng (Khumalo, 2008) and the Western Cape (Western Cape Education Department, 2006), as well as in the Foundations for Learning Campaign (Department of Education, 2008b). A thorough understanding of these policy directions manifested in the study and is reflected in this report. Previous work by the HSRC, such as a study on language teaching in primary schools in Limpopo (Reeves, Heugh, Prinsloo, Macdonald, Netshitangani, Alidou, Diedericks & Herbst, 2008), have also been brought to bear on the intended research throughout.

It is believed that having worked in a consortium of diverse academics, practitioners and other stakeholders who brought their empirical and theoretical inputs about how to perceive, study and recommend solving the problem of inadequate language and literacy acquisition and development, led to success in the proposed task. Linguists, teacher trainers, language experts, sociologists, research psychologists, teachers, university academics, curriculum managers in education and post-graduate students were the main actors who pooled their backgrounds and expertise to study the problem from different perspectives.

In pursuit of the highly-valued purpose of achieving originality, innovativeness, and novelty of approach, method and conceptualisation, the project followed a decidedly iterative and exploratory approach to establishing its conceptual / theoretical grounding (critical reflection on everyone's selected research approach) in the first period. This ensured that our conceptual points of departure represented classroom reality well, supported a robust and rigorous study subsequently, resulted in meaningful and significant findings, led to theory refinement, and enabled research and capacity development on all fronts.

Initially, the project was deliberately not embedded in a single conceptual framework or theory that would *a priori* stipulate what the underlying theoretical schools of thought and conceptualisation should be and that would apply to all the empirical work. Rather, conceptual frameworks were explored and analysed as part of the study throughout, in particular over the first 18 months. The team theorised classroom practice first to establish what was going to be observed. Robust dialogue and scholarship, within a tolerance of paradigms, and as identified and shared by each participant, followed and moved the team towards a broad "intellectual consensus" able to link theory and reality. A strategic focus, grounded in classroom realities and the history of South African education, which was perceived to stand at another juncture / crossroads, prevailed. Modular sub-teams and sub-projects collected unique classroom data which were shared widely to allow the creation of multiple understandings of a single classroom "reality". The team subsequently jointly used the "pegs" of theory to try and understand the observed "reality" / "realities".

There was always the expectation that substantive parts of the study would be constructivist to some degree (Vygotsky, social constructivism). It would also be largely qualitative-exploratory, multiple case-study based, and interactive and iterative. This by and large precluded quantitative survey-type work. Such an approach was expected to enhance underpinning conceptual frameworks and the rigour of empirical studies or knowledge production all along. This was also be how the consortium intended gaining the maximum value from working from multi-disciplinary perspectives including, to expand on the previous list, psychology (social and developmental), neuro-psychology, psycho-linguistics, curriculum studies, teacher training, education, policy making, school management, sociology, linguistics (applied and social), language studies, literacy studies, lexicography, classroom practice, educational assessment, ethnography, communication studies, etc. This was also how the meaningful interconnection between theory, concepts and reality, and the eventual research contributions, were maintained.

Finally, to avoid and help bring an end to exclusive, dichotomous or polarised thinking, the study maintained a balance between (or acceptance of the equal value of) "code" and "meaning" in language classroom interaction. With this is meant that the study refrained from dichotomous oppositions, such as communicative vis-à-vis grammar-based approaches, or whole-language vis-à-vis phonics-based or formal approaches, thus not endorsing either exclusively.

2.3 Aims and objectives of the study

Both the initial concept note in support of the team's seed-grant application (to conceptualise the project and establish the research consortium) and the comprehensive proposal prepared after that envisaged a study of much larger scope. The final grant award was approximately a third of the size of the initial request. This required curtailment of the aims and objectives of the study. The original objectives that had to be scaled down and adjusted were: (a) comprehensive overviews of the most important products and approaches used in teaching and learning towards basic literacy development at word-, sentence- and text-level; (b) documenting in detail the theoretical and conceptual foundations on which each of the above rest (to determine if practitioners, teacher trainers, managers and policy makers pursue less than optimal or outright deficient implementation practices not supported by any such theoretical positions); (c) providing

a sense of the conditions under which various products are applied and are most likely to be effective. The original intention was also to achieve these objectives by conceptualising an empirical study that would have components of both (i) qualitative and exploratory and of (ii) comparative, cohort or longitudinal nature in order to track the success with which a range of selected programmes / interventions achieve literacy development among learners in schools.

As a result of the background just provided, the study deliberately limited its focus in a number of ways. It did not track and compare different groups of learners, analyse learning materials and approaches comprehensively, and include an extended sample of sites. Producing a multi-authored edited book as main output was also foregone in favour of this comprehensive research report as final output. The study focused very specifically on literacy teaching and learning dynamics in classrooms in disadvantaged locations against the backdrop of specific conceptual and agency (practice) considerations. Three important drivers of the team's research were emphasised: literacy, classroom data, and paradigms / conceptual underpinnings of observed practice.

The overall aim of the study was maintained. It was to determine the effect of the relation between language acquisition and development paradigms (approaches) and daily teaching and learning classroom practices (interactions) on learners' actual language and literacy development (or improvement in proficiency or achievement). Specific research questions were if and how paradigms and practices interacted, and how and why such interactions determined language learning outcomes. Answers to the latter half of the question would clarify how language serves as either a strong or weak foundation for further learning.

The original division of the study into three phases was retained. These phases more or less overlapped with activities spread over each of three years. The objectives set for each of the three phases are outlined briefly next. Phase I's main objective was to contribute critically to the development of conceptual and theoretical foundations that could explain and underpin the rest of the study of language and teaching interaction. It required allowing small sub-teams of consortium members to undertake limited-scale, but in-depth, empirical pilot or investigative studies allowing intuitive data collection which would be interpreted by means of team members' theoretical or conceptual frameworks of choice. Sub-teams had to present their approaches and findings to the full team during periodic meetings to explain how their theoretical points of departure allowed them to understand aspects of classroom reality better. An important component of this objective was to identify and define the "literacy event" during which learners actually engage with "text" and achieve literacy development. Interactive seminars structured and stimulated critical debate. Work during this phase aimed at exploring how/which conceptual models would be useful to underpin classroom interaction research. Attention also had to be given to data-collection "instruments" and procedures that would enable achieving this phase's objectives. Provisional problem formulation, selection of themes and variables, aspects of methodology and design, and conceptual frameworks were therefore scrutinised during this stage by peers through critical debate. Refined formulation of the research problem and underlying assumptions, and breaking the problem down into additional more detailed aims and objectives also flowed from this work.

During Phase II the team's sense of what comprises the "literacy event" had to be refined. This had to ensure that subsequent work and sub-projects would be coherent in relation to unit of analysis and core design, sample and other features, having worked from differing vantage points so far. Digital video and sound recordings of selected lesson observations were selected as central information source. Allowing sub-teams to analyse the same classroom interaction ("reality") from different points of departure further strengthened the multidisciplinary approach to the study. Critical scrutiny of theoretical points of departure

was pursued through working meetings and periodic seminars. Provision was made for triangulating data and findings given the diversity of theoretical foundations and research approaches. Towards the second half of this phase deepened conceptualisation and consensus about working definitions drove further empirical observations that could now be embarked on.

The thoroughly contextualised, innovative and operationally coherent suite of empirical specialist studies that had commenced during the previous year (phase) had to be concluded during Phase III - the final year of the study. The work was underpinned by ongoing paradigm revision and the knowledge gained from the exploratory projects and seminars. It was hoped that improved understanding of classroom language teaching and learning realities would now also come to serve as baseline / benchmark for any similar subsequent studies, not excluding the possibility of specific follow-up work. Methodological "purity" was deliberately avoided throughout as fallacy or false notion. This was achieved towards the end of the study in particular by defining how the project could be "comparative" through triangulation across conceptual approaches.

Integration over years and across consortium researchers was operationally, and practically, strived at by pursuing a modular approach to sub-projects led by convenors (sub-project leaders). Such sub-studies aimed at capitalising on expertise, affiliations and networks across institutions, disciplines and designations. Selected operational objectives comprised inclusivity of involvement in relation to: academic and research institutions, schools, the public sector, non-government or non-profit organisations and unaffiliated persons; city and rural universities; language, education and other departments and faculties at universities; academics, teacher trainers, researchers, public officials, teachers and post-graduate students and research trainees; language as subject and as medium of instruction; first and additional languages; and urban varieties vis-à-vis so-called standard forms.

Before concluding this section, two strategic objectives that were deliberately pursued by the study are highlighted. They refer to research capacity development and redress.

Research capacity development took two shapes. The first was the involvement of a number of post-graduate students. The second was the inclusion of practitioners (teachers at schools and managers and other operational staff) in service of the education department. A majority of these participants were involved in every stage of the research, from the conceptualisation of the study and its sub-studies (with its specific design feature of critical discussion and refinement of theoretical foundations), through instrument development, to data collection, analysis, debriefing and reporting. Prominent forums enabling this dynamic were regular working sessions within and across project modules, and a wider joint seminar each semester. Students were linked to co-investigators and senior collaborators in formal supervisory relationships in pursuit of final-year honours-level projects and post-graduate research reports, dissertations and theses at masters and doctoral level. Formal registration at universities was a requirement, specifically from the side of the NRF in relation to being accepted as student support-grant holders. In addition, one of the post-graduate (doctoral) students was attached to the HSRC as research trainee. (A second student, identified initially, accepted a permanent post elsewhere before this arrangement could go into effect.) An overview is given elsewhere of student affiliations, involvements and contributions.

In relation to equity and redress, by far the majority of students linked to the project, as intended, were from formerly disadvantaged groups, and spoke the African languages of interest to the study. Given the demographics among incumbents in education department offices and FP classrooms and among students involved in education studies, the expected majority were also female. In addition, the research sites

comprised disadvantaged schools where learners by implication were exposed to learning in a second language. This ensured that the problems, issues and dynamics related to a range of decisions and practices in how schools and the department try to cope with the challenges would feature in the study.

In the next Chapters (3 and 4), the theoretical and conceptual foundations underpinning the study and its specific methodology are described. An important feature that is clearly visible at all times is the deliberately "catholic" or "ecumenical" approach of the study. The principle investigators and key partners realised early on that the study would achieve its greatest potential if wide accommodations were made. Put differently, the team had to avoid adhering to narrow perspectives in order not to have to deal with adversarial project dynamics and reticent thinking. Tolerating a diversity of paradigms was favoured above striving for consensus at all cost. Ambivalences and paradoxes were accepted. Retaining openness towards ongoing paradigm discussion and revision was also considered important and engaged in throughout. An example of a deliberate choice in this regard is that sub-teams between provincial research sites, and even school sites within the same province, pursued their own site and paradigm selection in view of which to study the sites. The data were shared freely and each one was allowed to view that through a preferred lens. The purpose was to enable straddling diversity in relation to socio-economic, demographic, cultural and linguistic realities among research team members and sub-teams, as well as participants and sites, to maximise the chances of gaining rich knowledge. A minimum set of common procedures and analysis frameworks was negotiated, nevertheless, all along. This had to ensure that the methodology and findings would be sufficiently robust and replicable to pass scientific muster, and that enough common ground was retained to still be able to communicate meaningfully with each other about the interpretations that could be made on the basis of shared observations. Although more detail is provided soon on the various facets just mentioned, an extended comment is made first on what the authors chose to refer to as "paradigm debates"; not only ours but also those between other scholars out there.

Paradigm debates

Much empirical research seems to be based on theories/paradigms which may not be explicitly articulated by researchers and are therefore hidden. But equally problematic is paradigm-determined empirical research. One such instance belongs to a historical phase in English language teaching innovation in the 1970s, where the different paradigms of language teaching were tested against each other in large-scale experiments to establish which ones were most effective for classroom practice. The "Methods Debate" as it came to be called (Allwright, 1988) ended when the results were inconclusive. Moreover, classroom-centred research established gaps between the theory driving the curriculum and the actual pedagogic practices of teaching and learning, leading Allwright, a pioneering classroom researcher, to write a paper titled "Why don't learners learn what teachers teach?" (Allwright, 1984), which provoked the language teaching community internationally. The theory-practice gap was the focus of a spate of important papers (Allwright 1993; Kumaravadivelu 2003; Ramani 1987) that led to the collapse of the dream of paradigms driving pedagogy, and to what was called the "post-method" condition.

The many ongoing discussions between the various members of the research consortium on this topic culminated in a more formal so-called "paradigms seminar", which was held towards the end of the second year of the study. A brief summary[1] follows of some of the participants' reflections. Neither a "paradigm blinkers" attitude (suggesting evasion of discussion with supporters of other paradigms) nor eclecticism (usually unprincipled, and/or unclear about what is being mixed with what) was considered helpful. Keeping the purity of paradigms (especially the expression of basic axioms) was considered important for

[1] Original notes were compiled by Prof M Joseph at the time after the seminar on 15 November 2012.

interpreting data, allowing for what Feyerabend (1975) advocated: the more paradigms an individual scientist uses to look at data the richer (and better) the interpretation. Similarly advocating a mix, or balance, between pedagogies deriving from different paradigms was deemed likely to be more plausible to educationists hailing from different paradigms if they are clear about the paradigms that inform the balance. The variety of permutations and combinations implemented in constructing a pedagogy (however balanced) do not require paradigm dilution to achieve such pragmatic ends.

Tensions in discussions between different paradigm holders may start off – as they did – with a "neutral" information giving goal, but end up with some amount of personal tension. This happens because people are not just "paradigm-holders" but "paradigm pushers". People want to persuade others that their paradigm is either the whole truth, or more modestly a very important part of the truth that others have missed. People also harbour judgements about other paradigms, which is also part of the "whole truth" or "important part of the truth" belief. It is this belief that makes people passionate about their paradigms – a good thing really. The choice between avoiding tension by avoiding paradigm clash on the one hand, and enhancing passionate persuasion of each one's (whole or partial) truth on the other hand, is inevitable in a seminar aimed at exploring each other's paradigms. Paradigm clarification requires philosophical courage; empirical analysis precision, rigour and some amount of consensus-seeking in the research team. The goals of both paradigm identification and exploration were achieved by the team's seminar. Instead of the *rigor mortis* of empiricism we have moved towards the philosophical rigor of mindful empirical analysis. Careful, flexible and dynamic consideration was also given in advance to the role and place of new neuro-science bases (e.g., neuro-linguistics). Socio-biology, brain research and neurological theories have in the past made claims about human behaviour that subsequently came under suspicion for a number of reasons (racist theories, sexist theories, reductionism to animal consciousness, etc.; see Gould, 2002). Some of these sociobiological theories (including Chomsky's, 1959) have been criticised. However a new spate of research in neurobiology has emerged that seems to be non-reductive and open to a dialectical relation between environment and brain. However, brain research findings are open to interpretation from any of the paradigms: behaviourism, innatism and constructivism. The position of neuro-linguists vis-à-vis these paradigms remains a matter for discussion. The issue, for instance, whether proponents are seeking a co-relational suggestive approach or a cause-and-effect explanatory approach, is far from clear. So are its sociological dimensions: What sociology do neuro-linguists want to draw upon: a descriptive sociology / ethnography, or a critical sociology / ethnography? If they are studying how environments impact on the brain positively or negatively, then the diversity of environments becomes crucial, suggesting a suitable sociology. The following concluding remark at the seminar steered the team at the time towards applying analysis paradigms to its transcript data: Post-methods does not mean post-paradigm. When interpreting classroom data, it is possible to argue that while particular methods, policies and plans do inform pedagogy, they do not therefore determine it. This asymmetry – between curriculum planning and pedagogic practice – is similar to the "post-method" argument (Kumaravadivelu, 1994) that was aimed at loosening up the otherwise tight connection between theory and practice assumed by experts in the 1980's, and that proved to be a failure. Allwright's claim (1993) that classroom practices can be the basis for extracting pedagogic theory, and seeing complexity rather than straightforward solutions, is in line with this post-method position. However this autonomy of classroom practice (visible in classroom interactive data) does not make interpretation of data paradigm free. The seminar enabled the team to have clarity about its "paradigm-driven interpretation of data (transcripts)", which had consequences for how we handled paradigm differences between each other.

Chapter Three - Conceptual frameworks and theoretical foundations – multiple perspectives and deliberate balances

An abundant literature, seemingly expanding rapidly, to varying degrees covers conceptual frameworks and theoretical foundations that may underlie the current study. The challenge is attempting not to cite or overview all of it here. That would be the task of a systematic review, which may in fact be overdue. Contributions bordering on being too broad or general in relation to our deliberate focus on literacy will therefore be cited and discussed very selectively. However, a minimum extent of broader contextualisation is considered to be valuable for our purposes.

3.1 Amidst recent debates and within the context of policy

In this section, the completed study and this report are placed within the context of recent and present debates and current policies to enhance the relevance of the findings.

A central dilemma concerns the causal apportioning of credit or blame for learners' strong or lacking language and literacy proficiency. The main reason for this difficulty lies in the very open continuum in relation to the respective contributions by the home environment (parents, but also communities), on the one hand, and through formal schooling, on the other. In addition, outcomes for an individual learner vary exceptionally widely on the basis of which exact homes and schools (and teachers) are involved, not to forget factors associated with each individual learner's cognitive potential. It was for this reason that some introductory notes about the notion or meaning of education as such[2] was considered necessary at this point, with a view to its contribution to how a learner becomes literate and learns language. Education is the way in which human communities groom youth into adults. When time comes, this new generation of adults takes over the burden of ensuring the community's survival and prosperity and blooming of its legacy. No society could survive without some form of education. Most, if not all, settled communities adopt formal education, that is, structured and organised settings for children to learn in (also see Alexander, 2010). It seems that only nomadic communities in thinly populated areas have not adopted or developed such formal systems; there learning occurs only within the family (Lafon, 2014).

Webster online (http://www.merriam-webster.com/dictionary/education, retrieved Nov 2013) defines education as:

> *Learning that takes place in schools or school-like environments (formal education) or in the world at large; the transmission of the values and accumulated knowledge of a society.*

Similarly Wikipedia (http://en.wikipedia.org/wiki/Education, retrieved Nov 2013, updated April 2015) emphasises that:

> *Education in its general sense is a form of learning in which the knowledge, skills, values, beliefs and habits of a group of people are transferred from one generation to the next through storytelling, discussion, teaching, training, or research. Education may also include informal transmission of such information from one human being to another. Education frequently takes place under the guidance of others, but learners may also educate themselves (autodidactic[3] learning). Any experience that has a formative effect on the way one thinks, feels, or acts may be considered educational.*

[2] Contribution mainly provided by M Lafon.
[3] Dewey (1916).

The model of school education that has spread worldwide, particularly in Africa, evolved in Christian Europe under particular circumstances. This model over time and space denotes many different influences, ideological as well as political. It also shows strong local / denominational peculiarities, many of which left a clear mark. Its focus on literacy is a historical development that had to do with the development of the societies it originated within. It was carried by European colonial powers into their dominions. This trend has been accentuated further through globalisation, which, in ideological terms at least, amounts rather to westernisation under a capitalist liberal paradigm (Ndhlovu, 2013) to the point of becoming the default model. Even more than before, "literacy is the key to the curriculum. Virtually all schooling after the first year or two assumes pupil literacy" (Hannon, 1995 in Bloch, 2000, p. 4).

With specific reference to education in Africa before the colonial period, African societies had each developed their own strategies of education. According to Rodney (in Abdi[4], 2006), the following features were characteristic of African systems: close links with social life, collective nature, progressive development in conformity with children's age, and no separation between education and productive activity and between manual and intellectual domains.

In most communities, young children would normally learn about their community and its mores, beliefs, moral codes and behaviours through tale-telling activity, which gathered the young around the adult(s), besides other language-driven activities. To mark the turning point into adulthood in many societies, girls and boys would be initiated, a process that could be lengthy and included relevant teachings, such as "the love and protection of nature" (Haire & Matjila, 2008, p. 161) and occasionally the teaching of secret languages or professional codes. Moreover, in what Akkari and Dassen (2004) refer to as "situated education", children, according to their gender and age, would be associated with activities central to the continuation of the family and the group - herding cattle, cultivating crops, fetching wood and water, nourishing and catering for the young, etc. Some societies evolved strict age-class systems, whereby youth would go from one class to the next mediated by accomplishments and ceremonies. These practices were all-encompassing, that is, almost all children in a community would have to undergo them as a matter of course regardless of their social status.

Colonisation not only brought the western model of education but the demise of the existing ones. Missionaries, by far the main purveyors, fought against traditional education pictured as "heathen" and incompatible with the new creed. Education was equated with conversion to Christianity. One had to choose. School education was probably the main ideological lever towards assimilation; "the initial role of all missionaries was to facilitate the cultural reorientation that accompanied black accommodation to the social reality of white power" (Keto, 1977, p. 601). Soon, Western education became the ladder to access white-collar jobs in administration, mission organisation and the like, and thus gained large acceptance among the population. At the same time (though usually in a later development), it offered Africans the means to contest the situation, as expressed by Mphahlele (2004, p. 13):

> *… let us recognize the vigour of the pioneers of missionary education (…). Missionary education (…) provided space for students to create their own learning environment, and a starting point from which several of us continued to re-educate ourselves and explore the outer reaches of self-development in relation to the community. The more progressive amongst the alumni of*

[4] Also see Abdi, Puplampu and Dei (2006a, 2006b).

mission schools were able to use that same education to rethink the narrowness of the church-going religion the scripture lessons had pumped into them.

The imposition of (western) education in any case led to Africans being "educated away from their cultures" (Brock-Utne, 2000, p. 17). Come independence, almost all newly-founded states had as their policy to take over and expand most of the colonial legacy. Extension of schooling to the whole population became a priority objective. This was attained in South Africa after 1994 when schooling was made compulsory for all children. Programmes, curricula and methods - including medium of instruction - remained largely those introduced by the former colonial powers; western in their design and contents. Few, if any, provisions were made for integrating local knowledge and practices as well as languages. African systems of education as a whole remain Euro-centred, based on literacy, which is the main vehicle of assessment.

Voices on the continent and outside have in recent times criticised this state of affairs and called for an African curriculum. In the wake of the 1990 Jomtien Education-For-All Conference, this concern was high on the agenda of African representatives (Brock-Utne, 2000, p. 9). Alidou (2009, p. 119), for instance, projects African education "[as] a societal project that takes into consideration African languages, cultures, values and belief systems and above all the type of societies that each nation wants to build." Also Dei and Alireza (2006, p. 58) states that: "An African-based education [should] build the individual and collective worth of learners as responsible and conscientious human beings who (…) fulfil their common obligations to a larger (…) community". The 2012 ADEA Youth Forum further stated: “African cultures, history and languages [should] be placed at the heart of the development of education and training” (Glanz, 2013, p. 58). (Also see Alidou et al., 2006; and Brock-Utne & Skattum, 2009 for related understandings in the African context).

In South Africa, probably more than in most other African countries, the ideological discourse in favour of indigenous knowledge(s) and culture/s in the name of authenticity and cultural rights (echoing the past history of the country) has made space for local languages - as LoLT in the first three years of primary school and as subjects throughout - but much less for specific cultural practices, except, possibly, as emanating from texts in language classes. In the name of cultural rights, attendance at initiation schools, however, is condoned even if it entails absence from schools during the compulsory period (Mamelodi, own research - Lafon). Still, in the early years, there is much less recourse to genuine texts from the cultural trove of each official language as one would expect (own research, Lafon). Beyond the early years, that is, in more advanced grades, the ideological precedence given to literacy over oracy, and the attempt to emulate the English curriculum so that all curricula may be purported to be comparable across languages, tend to neglect oral genres such as folktales, riddles, etc., even when compilations exist. Curricula, even for African languages, include mostly written pieces - short stories, novels, theatre plays and poetry, of recent making - that can be equated to English-language works (from a look at the isiZulu curriculum in 2010 and 2011). This may of course not be identical across all languages and changes from one year to the next.

A central point, if not the main point, from the excursion above on the nature of education, also in post-colonial Africa, is that the learning (and teaching) that happens in the language classroom is but a small part of all the broad education influences which determine a learner’s language and literacy proficiencies. One can therefore never claim to control (or remedy) all literacy and language acquisition and development purely through sound classroom practice, although it plays an extremely important part.

Some of Heugh's arguments, specific elements of which are referred to shortly below, with a point raised early on by Barnes (1969; 1976), resonate well with the point just made about inside- and outside-the-classroom influences on literacy and language acquisition and development.

3.1.1 Classroom-centred research

In pursuit of others in the field of classroom-centred research, such as Flanders (1962), Stenhouse (1975), Barnes (1969, 1976) and others, Allwright (1993) argued persuasively for researchers to treat classroom interaction itself as the source of theory, rather than "applying" theories developed outside classrooms to them. This approach was first put forward by Barnes in differentiating the curriculum (1976) into the "overt curriculum" (textbooks, policy documents, lesson plans, test results, etc.) and the "hidden curriculum" (the non-verbal and verbal interactions of teachers and students, that is, what happens in classrooms in reality through some kind of tacitly agreed-on practice). Barnes pointed out that learning happens in the transient interactions between teacher and students rather than in the overt curriculum; yet most research tends to focus on the overt curriculum with the assumption that it determines learning. Researching the hidden curriculum led to the collection of audio- and video-data of interactions and the development of analytical frameworks derived from different paradigms of learning. Barnes himself was inspired by the theories of Piaget (1926, 1973) and Vygotsky (1962), which claimed that learners construct knowledge with the mediation of the teacher or capable peers. Thus classroom-centred research attained a certain kind of autonomy from theory-determined curricula, but also created evidence from "within" the classroom that allowed theory/paradigms to be the lens through which to look at the hidden curriculum. Classroom data, though interpreted by particular theories, nevertheless permitted the gaze of other theories in the manner that Feyerabend (1975) recommended.

More could be gotten out of the data, even if the data was selected and interpreted by a particular theory. A narrow empiricism of the inductive kind ("letting the data speak for itself") could thus be averted, as well as a rigid deterministic use of a theory. Proponents of different theories could now engage with one theory's data, as well as engage with rival theories around the data, grounding theoretical debate in evidence, rather than rhetorical debates between theories. The axioms of these theories – essential to Kuhn's idea of paradigms (1962) – could emerge in relation to how data could be viewed differently in terms of these axioms. Even though such an ideal philosophic discussion between paradigms around data rarely happens in practice, the possibility of conducting such a discussion offered to us in the NRF research team a non-dogmatic space for entertaining different paradigms without the fear of having to abandon one's own. In such a space, that we attempted to create, obviously the more plausible the explanation of the data (collected by everyone, and motivated to some extent by each researcher's own paradigm) the more convincing the paradigm that motivated the explanation. Such "paradigm pushing" was found to be a principled and exciting way of conducting professional discussions that led to new ways of perceiving the data, and greater clarity of the lens or paradigms involved.

It was in this sense that we summed up the post-method condition of language teaching as: post-method does not mean post-paradigm. The centrality of paradigm-driven, but not paradigm-determining research, and not empiricist inductive research either, emerged as a research consensus in a team that was initially fragmented by multiple but non-engaging paradigms of human learning. There was also a modest realisation that initially one was not clear about what one's "own paradigm" actually was, and it was only when data provoked dissent that the discovery of one's own paradigm followed. Quite apart from the epistemological usefulness of such a discovery, both for individuals and the team, was the ensuing sense of empowerment and satisfaction – the affective usefulness of the theory-data interactions, and its consequent outcome as team solidarity.

3.1.2 Central concepts and working definitions

For the purposes of the study and the present report, working (operational) definitions of central concepts were adopted early and refined throughout to ensure that team members remained focused on the same object/s of study while deliberately retaining some conceptual flexibility and openness. Concepts of a more technical or theoretical nature are defined and further expanded on in Section 3.2 below. A glossary of more universally accepted terms and their definitions are also included at the end of the report (before the References). The following were the key terms used:

- Literacy is the young learner's newly acquired ability, in the context of formal schooling in mainly the Foundation Phase (Grades 1 to 3, and R), to engage sufficiently fluently with written text in order to retain meaning (comprehension) while reading (receptive competence) and writing (expressive competence). It is granted that learners may differ vastly in relation to the individual trajectories of decoding and encoding proficiency each is on. However, sufficient literacy proficiency is required to allow a learner to unlock grade-appropriate learning or curriculum contents.
- Bi-literacy occurs when a learner is sufficiently proficient (i.e., appropriate for the grade) in reading and writing two languages at school level.
- Multi-literacy occurs when a learner is sufficiently proficient (i.e., appropriate for the grade) in reading and writing more than two languages at school level.
- Bilingualism can either have an oral or written meaning, depending on context, and refers to a learner's sufficient proficiency to communicate in two languages in the broader community and in school, either through general oral communication or formal written modes.
- Multilingualism can either have an oral or written meaning, depending on context, and refers to a learner's sufficient proficiency to communicate in more than two languages in the broader community and in school, either through general oral communication or formal written modes.
- Building on Hymes' concept of "speech event" (1977), Heath (1988, p. 350) developed the concept of "literacy event" as "any action sequence, involving one or more persons, in which the production and/or comprehension of print plays a role." She elaborates that a literacy event is "any occasion in which a piece of writing is integral to the nature of participants' interactions and their interpretive processes." In this view, a literacy event is not limited to reading and writing of texts but to all activities that happen around a text, including oral interaction. Texts could include visual material such as pictures, maps, graphs, etc. In the analysis of classroom data collected on the project, literacy events were identified as the units of analysis. It was expected that all research team members and co-authors would identify such literacy events in their data and, in writing up their analyses and findings, would focus on the interpretation of pedagogic procedures around literacy events.
- Oracy refers to the young learner's ability, acquired in both the pre-school context and formal schooling afterwards in mainly the Foundation Phase (Grades 1 to 3, and R), to engage sufficiently fluently with language, both aurally (receptive competence) and orally (expressive competence), with retention of meaning (comprehension). The size of a learner's age-appropriate vocabulary is a key determinant in evaluating the presence of sufficient oral proficiency.

Broader conceptual positions that framed and helped position the data-collection and analysis activities of the study are introduced and outlined next. These to various degrees formed part of the investigations.

Translanguaging

Translanguaging is a very useful addition to the sociolinguist's toolbox for describing, if not acting on, complex multilingual situations (Lafon, 2013). It illustrates the perception in the young learners' minds that, regardless of levels of fluency, formal boundaries between the several languages they have at their disposal

are probably non-existent. Such boundaries are usually reinforced only later by the school and/or during social interplay, and obtain at both oral and written level (for instance, Garcia, Skutnabb-Kangas & Torres-Guzmán (2006); and Mbodj-Pouye & Van den Avenne (2007) for spontaneous writing mixing French and Bambara in rural Mali). Translanguaging therefore encompasses code-switching, code-mixing, borrowing, etc. The concept vividly captures the dynamics of the bi- or multilingual classroom, and beyond, of communicative events in postcolonial contexts, emphasising the potent creativity involved.

It makes pedagogical sense to scaffold learning of a dominant language used as official MoI among pupils having a local, low-status language as home language (see Chimbutane (2011) in reference to Portuguese in Mozambique). Importantly, translanguaging is devoid of any functional hierarchy among the languages present, whatever their degree of development and preferred domains of use. This is what Basu (2011, p. 1311) calls "multifarious, allowing a rich interplay and exchange of cultural diversities" (also see Creese & Blackledge (2010), quoting Garcia (2006), and Plüddemann (2011, 2014)). It also implies a non-diglossic view of code-switching (Garcia (2006), quoting Baker (2003)). However, care is of the essence in manipulating the concept: “it (translanguaging) is not a case of anything goes” (Plüddeman, 2011, p. 10).

A key concern is the sub-standard reading and written proficiency of learners in language subjects, be they home or additional languages. Heugh (2013a) recently explored possible explanations in this regard from the perspective of the assumed polarisation or dichotomy of approaches between two paradigms / schools of thought (i.e., the communicative and phonics approaches), with one conclusion being that the issue and debate is often being oversimplified, because both approaches have problems and value. Heugh (2015) also offers translanguaging, together with genre theory, as a promising pedagogical response to education systems where linguistic and socio-economic diversity prevail. At the heart of it lies enhancing teacher agency in mobilising the language knowledge resources of learners in multilingual settings.

Communicative language (vis-à-vis phonics)

Heugh (Heugh et al., 2013b) contributed much over the years to clarify the contributions by many approaches to language and literacy learning. Two main approaches are the communicative and whole language approaches, each with their advantages and disadvantages. The communicative approach hoped to move beyond basic reading and writing as a form of education and emphasises listening and speaking. This approach has resulted in the lack of structure and form necessary for learning a language and has impacted learners’ reading and writing ability. The whole language approach argues that phonics learning is no longer necessary, promotes learning through increased exposure to whole texts and considers language and literacy development as two separate entities. Unfortunately, this approach only had success in higher socioeconomic environments and only in HL speakers. Therefore, this approach would not be considered useful in a third-world country such as South Africa, where there isn’t a strong emphasis on a variety of reading obligations and tasks, limited access to reading resources and a low culture of reading. Both these approaches are believed to have low achievement outcomes and will inevitably fail the learners.

Phonics

Intense discussion around the topic of phonics prevailed at various stages of the project during its working seminars. Differences centred on meaning-focused “embedded phonics” vis-à-vis “pure phonics”. These differences were suggestive rather than sharp. The phonics approach is currently supplanting the whole language approach (“embedded phonics”) in the USA. Perhaps in South Africa a “phonics stage” in the early classes of primary school education rather than “an approach” is being advocated as the solution to the “literacy crisis”. A “stage” (component) of curriculum allows for a “balanced” approach to be taken, which might mean an initial pure phonics phase followed by the “rest of the curriculum” relying on meaning-

focussed reading with forays into embedded-phonics. Whong (2013) provides a useful evaluation in relation to how a long period of dominance of communicative language teaching, where "structure" got all but neglected in favour of "meaning", are being tempered of late by reemphasising the importance of linguistics to language teaching. Attaining a balanced position has been the growing outcome in the process.

The present study's paradigm-refinement questions in contrast to pedagogic pragmatism, were as follows:

- Are the axioms behind the two radically different?
- If there are radical differences, what implications do they have for a "balanced" approach?
- How can a balanced approach avoid any stigma of unprincipled eclecticism, but be based instead on a principled integration?
- Could the balance more easily be achieved by teachers who have an integrated approach to skills, but not be achievable by the average teacher who has already been over-schooled in a "separate skills" background?
- Is it possible that the pure phonics stage of foundational literacy might get assimilated into the existing low cognitive level of most teaching (see Gauteng transcript data) delaying cognitive activities and locking teachers into a permanent state of "safe-talk" – being boxed into quadrant C, which makes quadrant B unachievable by teachers?
- Would, otherwise, pure phonics – in small doses – train teachers, hitherto deprived of any phoneme-grapheme skills, how to make the risk of such a mindless (albeit temporary) intervention worthwhile? Will, in other words, teachers automate (automatise) phonic skills and then move towards a more creative stage of holistic meaning-focused literacy?
- South African Bantu languages spelling systems are mainly phonemic, English is not. Can the same approach be followed to teach spelling in such different systems? (Could this perhaps provide a way to consensus?)
- Is the CAPS top-down policy implementation, where teachers "carry out instructions" without reasoning why, a necessary stage in South African educational history to compensate for the omission of literacy under OBE / Curriculum 2005 / and the National Curriculum Statement/s (NCS)?
- Is accepting such a top-down policy a necessity that we all abide with or is it surrendering to government's well-known abdication of responsibility to do effective teacher training and development? Or, is it a necessity in overcrowded classes? Should one not accept that township schools and ex-model C schools cannot function similarly?
- Is the literacy debate in America a closed chapter that one should read as background information, to then move on to implement phonics; or should that debate be reopened in South Africa so that we may re-define our position and revitalise our thinking in the process?

Another attempt of the project team (especially during the initial stages) at understanding how the most immediate preceding debates, policy and policy implementation resulted in the current neglect of languages, has been to think in terms of local and global language statuses. English has strong currency in contemporary South African society. It is perceived by many as the golden key to employment and wealth. In an era of globalisation, many commercial, trade, academic and other opportunities are perceived to be of an international nature. One significant upshot of these perceptions and realities is strong and increasing pressure for learners to be taught English, and to be taught through English. The capacity of the schooling system to keep up in terms of enough sufficiently-qualified teachers, curriculum implementation, learning materials, etc., has been found lacking, even though the will is there. The devaluation of African first languages or mother tongues constitutes a similar outcome from an opposite cause; the absence of the will

to ensure sufficient numbers and quality of appropriately-qualified teachers, learning materials and curriculum delivery practices.

The local language policy context against which the study has taken place has also played a significant part in the study's conceptualisation and scope, and more importantly, the value of its findings and the audiences to which they are relevant. Initial implementation of the remedial policy decisions (in 2013, beyond the programme's time frame) towards making an African language compulsory, commencing at the university of KwaZulu-Natal and in selected primary schools, initially failed to impress as solution, because it was severely lacking (personal communication to Lafon, by Rudwick, in progress) or mainly not existing. (More information follows on this policy shortly in the relevant sub-section (3.1.4).)

On the curriculum front, the study early on also had to factor in certain policy implications. The first concerned participating schools in Limpopo and Gauteng, because the changes were national. One year into the three-year study, in the transition from 2011 to 2012, NCS was replaced by CAPS. Memories remain of the acrimonious debates at the time of this being the death knell of OBE, or not. Besides signalling another discontinuity that increased teacher insecurity, real changes had to be effected by teachers and schools in relation to how learning programmes and lesson plans had to be structured, delivered, adhered to and monitored. A complaint often voiced by teachers was that the curriculum policy did not leave them enough room or flexibility to ensure that all learners master the specified or requisite conceptual achievements at a given point (i.e., that day, week, month or thematic cycle). Once scheduled points had passed, they had to move on to the next work. The second implication concerned only Gauteng schools. It was related to how the Gauteng Department of Education (GDE) focused on and interlinked its Gauteng Primary Language and Mathematics Strategy (GPLMS) to CAPS. Introduced in January 2010 in its initial form, as the Foundation Phase Gauteng Primary Literacy Strategy (GPLS) among Grade 1-3 learners from 800 poorly-performing township schools, including the schools observed, it developed and expanded through a literacy and numeracy strategy, the Gauteng Primary Literacy and Numeracy Strategy (GPLNS), to its current form and scope among all grades in more schools. Teacher training, graded readers, teacher guidelines and customised phonics programme assistance are being employed to improve language skills (http://www.education.gpg.gov.za/Media/news/Pages/GautengprimaryschoolinterventionsimproveANAresults.aspx). School observation in Gauteng had to keep track of these changes in relation to evaluating school language practices and outcomes, especially as during the first year of implementation, teachers, who had been work-shopped intensely, were closely monitored as to their compliance with the programme.

Around the same time assessment policy and practice underwent substantive shifts. This change has been leading to a stronger emphasis on the value of assessment marks to learners, teachers and schools. We're referring to the introduction of Annual National Assessment (ANA). This process saw the system moving away somewhat from a systemic-assessment perspective and philosophy towards an assessment-for-learning one. It has to be noted, on the other hand, that participation in regional and international large-scale benchmarking studies have not been scaled down, but rather firmed up. Returning to ANA, it should provide teachers with improved knowledge about which learners are struggling with which work, and the basis for remedying the situation through adjusted classroom practice. However, initial observations and concerns continue to identify the perverse, as it were, incentives related to relatively high-stakes dynamics. Because the reputation of schools are threatened by being identified as struggling or dysfunctional, and thus deserving the subsequent measures of redress, teaching-to-the-test dynamics remain strong and may detract from the intended focus on foundations, building blocks and sequenced conceptual mastery of learning contents.

Two brief sets of comments (in 3.1.3 and 3.1.4) are made next about the most salient language policy contexts for the study before situating the study (in Section 3.2) more substantively within those existing conceptual frameworks that proved most helpful to it eventually. The matter of language policy and teaching in schools was considered to be sufficiently important and critical for the country to warrant a number of presentations on occasion of a Government Cluster workshop in February 2014. Heugh (2014) and Ramani and Joseph (2014) were invited to provide inputs. Ramani and Joseph (2014) highlighted the inadequacy of promoting African languages as mediums of instruction and assessment without changing the dominant routines of oral, teacher-led, lower-order, chorus-based interaction. For EFAL, they argued, the focus needed to shift to a bi-literacy approach, in which the acquisition of both languages is facilitated through mutually-interactive and supportive strategies, rather than taught independently of each other as is the current practice. The implications of this for CAPS training were spelt out too. They also foresaw conflicting agendas between the proposed Incremental Introduction of African Languages Policy IIALP and the need for teacher development models focused on existing best practices. Heugh (2014) emphasised the effect that the global increase in diversity related to multilingualism has on education. She argued that the African and Asian experiences of over 2 000 years in this regard put its research knowledge on the topic above that of the North.

3.1.3 Language in Education Policy (LiEP)

The current Language in Education Policy (Department of Education, 1997) was developed in the post-apartheid period, during the transformation of the education system. The idea behind LiEP was to improve learning in multilingual classrooms through increased access to knowledge / information by using the learner's home language as the medium of instruction, whilst building the proficiency levels of their FAL. This concept is known as additive bilingualism. Unfortunately, to date, the South African education system is still plagued by poor achievement scores. It is argued that these poor results are due to the poor implementation of LiEP, therefore failing to provide the necessary standard of education to learners to achieve in bi/multilingual classrooms (Taylor, 2012; Van Staden & Howie, 2012). Kioko, Ndung'u, Njoroge and Mutiga (2014) provided a valuable evaluation of attitudes and misconceptions in relation to the use of mother-tongue education in Africa. They touch on many of the issues related to the educational benefits and economic opportunities assumedly associated or not associated with teaching in the mother tongue.

3.1.4 The Incremental Introduction of African Languages Policy (IIALP)

The Incremental Introduction of African Languages Policy (IIALP) (Department of Basic Education, 2013) has been designed to improve proficiency for African HL learners and strengthen the use of African languages for non-African HL learners in Grades 1-12. Unlike the current LiEP, IIALP requires the learners to learn and pass three official languages; one at HL level and two at FAL level. It is hoped that this policy will assist with social cohesion, nation building, promotion of equality, preservation of African heritage and increased access to African languages. The policy acknowledges that poor achievement scores are due to lack of language proficiency amongst learners and aims to improve that. Constitutionally, in public institutions, all learners have the right to receive education in their HL or a language of their choice. However, according to the South African Schools Act of 1996, school governing bodies have the power to determine the language policy within a specific school. Although learners have the right to be taught in an official language of their choice, the school's decision on its language policy are very often based on feasibility and practicality. This policy will require yet more funds and resources that are currently dwindling.

3.2 Locating the study broadly within existing conceptual frameworks

The scene within which to locate the description of how our study unfolded and what we found is now halfway set. Demarcations from the side of current conversations and relevant formal policy now have to be followed by setting the other half of the scene. This refers to an overview of conceptual frameworks and theoretical positions underpinning research and the work of language-teaching practitioners. Before becoming specific about frameworks and theories, and adopting an approach for the present study, some recent attempts at providing comprehensive taxonomies to make sense of what has become a dynamic, vast-developing and complex field are referred to. In a way such taxonomies create a second-level or higher-order classification to bring order to understanding the multitude of contributions out there. One could also consider such classifications as collective schools of thought grouped in terms of common features between more detailed or specific theoretical or conceptual elements. Being too deterministic or categorical about such schemes, however, may result in the mutually exclusive outcomes of either (only) adhering to a whole-language, communicative, conversational and/or social-constructivist approach, or (only) to a structured, formal, grammar, phonics, psycholinguistics and/or cognitive neurosciences approach. The contention of the present authors is that such exclusive thinking creates false dichotomies. It is much more functional and productive, on the other hand, not to get stuck trying to classify techniques, methods and approaches into watertight separate or oppositional compartments, but rather to understand each approach in relation to the position it takes on and the use it makes of the coherence of structures, role players and interactions at play in day-to-day language-teaching practice and concurrent thinking about that. Practice and theory, coherently integrated, have to account for the value, role and contribution of teachers, curriculum, school management, infrastructure, etc. against the backdrop of socio-economic, demographic, economic and linguistic reality. Paradigms and conceptual notions, methodology, collecting and analysing empirical data and actual classroom events will similarly have to be integrated well in research such as in the present study.

A deliberate objective of one specific joint consortium working session during the second half of the study was to compile or obtain a broad overview that would give the research team a good handle on the possible ways in which scholars perceived, and compiled, conceptual overviews. That is not to say that the topic was not addressed otherwise. On the contrary, it formed a recurring and always lively conversation. Be it as it may, some contents that follow have been derived from working documents produced at the time to reflect a few of the main lines of thinking in as far as conceptual theory and “taxonomies” go.

A cautionary note is appropriate at this point. It makes a big difference to all of their work if practitioners, researches and theorists adhere to either a bilingual or a monolingual departure point. What is more, this may or may not overlap in some studies with the research subjects actually being monolingual or multilingual. One does not have to search far or deep for some fundamental reasons for such caution. Perhaps the most salient ones would be that monolinguals by and large learn their language as mother-tongue under naturalistic, non-structured and immersed conditions during early childhood, often in adherence to critical periods and sequences, without too many competing complications in terms of cognitive challenge, dissonance or the like. Multilinguals acquire their two or more languages in many mixed and variant configurations across home- and second- or additional-language conditions, non-natural and structured environments, running over into middle and later childhood, even adulthood, outside of fixed periods and sequences, and with many competing cognitive complications and dissonances.

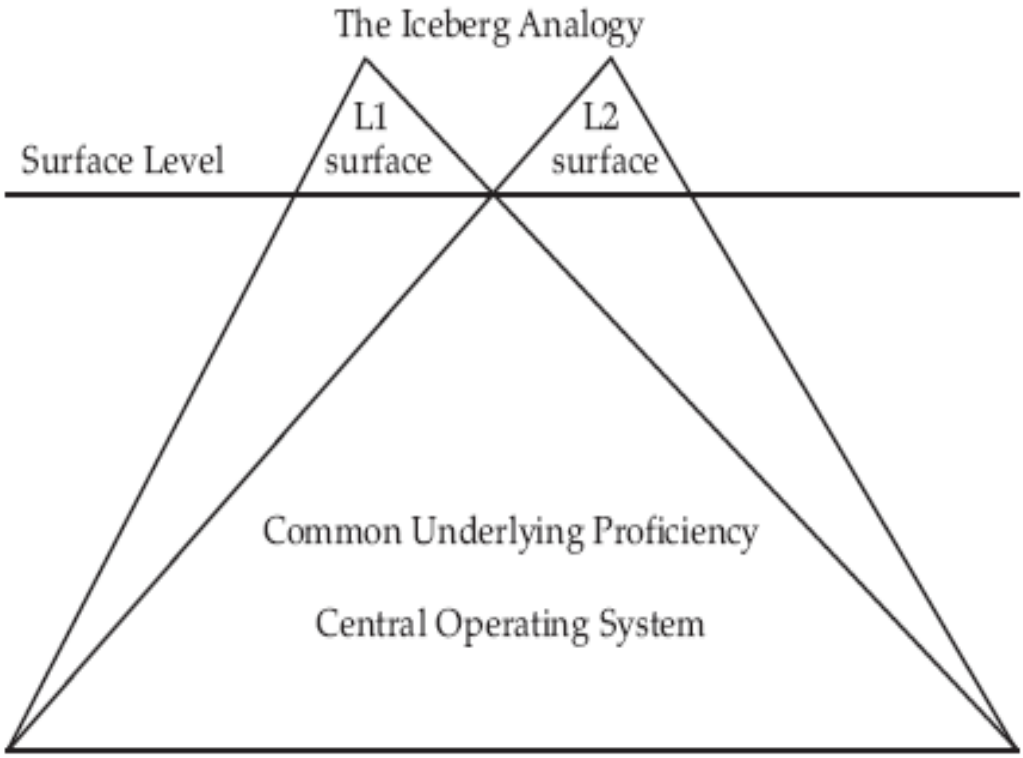
Variable situations such as the foregoing led Hornberger (2003a) to coin and prefer the so-called Continua (of bi-literacy) Theory. According to this theory, there is always variation along the line of bi-literacy. Every individual’s unique circumstances determine the presence and role of, and proficiency in, each of multiple

languages across other continua such as the movement from oracy to literacy, the relationship between home and second languages, etc. The foregoing resonates strongly with what Cummins proposed in relation to notions such as language interdependence / transfer and thresholds.

3.2.1 Cummins' theories

The interdependence hypothesis, threshold theory and Cummins' BICS and CALP notions are illuminated further.

Interdependence hypothesis theory

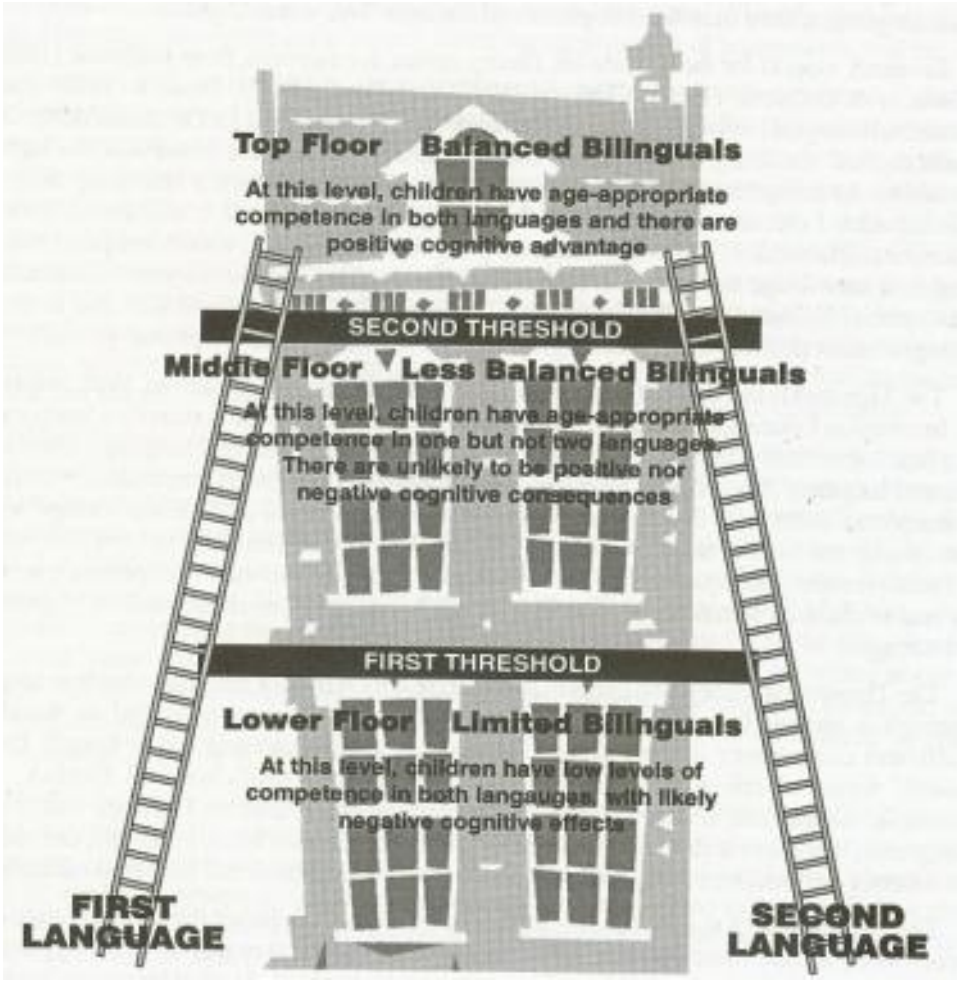


(Baker, 1993; Cummins, 1979, 1992; Fanson, 2009)

Figure 3.1: Cummins' iceberg analogy on proficiency in two languages

In short, as depicted in Figure 3.1, Cummins' interdependence hypothesis theory (also known as the "iceberg theory") uses the analogy of an iceberg to explain the interaction between language and cognition. This theory explains how the varying levels of language proficiency in bilingual learners (L1 and L2) impact learners' literacy and cognitive processing abilities (Central Operating System, or COS). Cummins argues that L1 and L2 allow for transferability between the two languages and the COS, therefore, any information acquired through the L1 will become accessible in the L2 when adequate proficiency levels are met and *vice versa*. It therefore explains how varying language profiles impact the ability to process and store information in another language. Within a South African education system context, Cummins' theory explains learners' inability to process information in a second language (that they are less proficient in) and believes that in order to achieve, learners should be taught in the language they are most proficient in. Furthermore, if one or both languages are not fully developed, both cognitive and academic achievement will be negatively impacted (Baker, 1993; Cummins, 1979, 1992).

Threshold theory



(Baker, 1993; Cummins, 1979, 1992; Fanson, 2009)

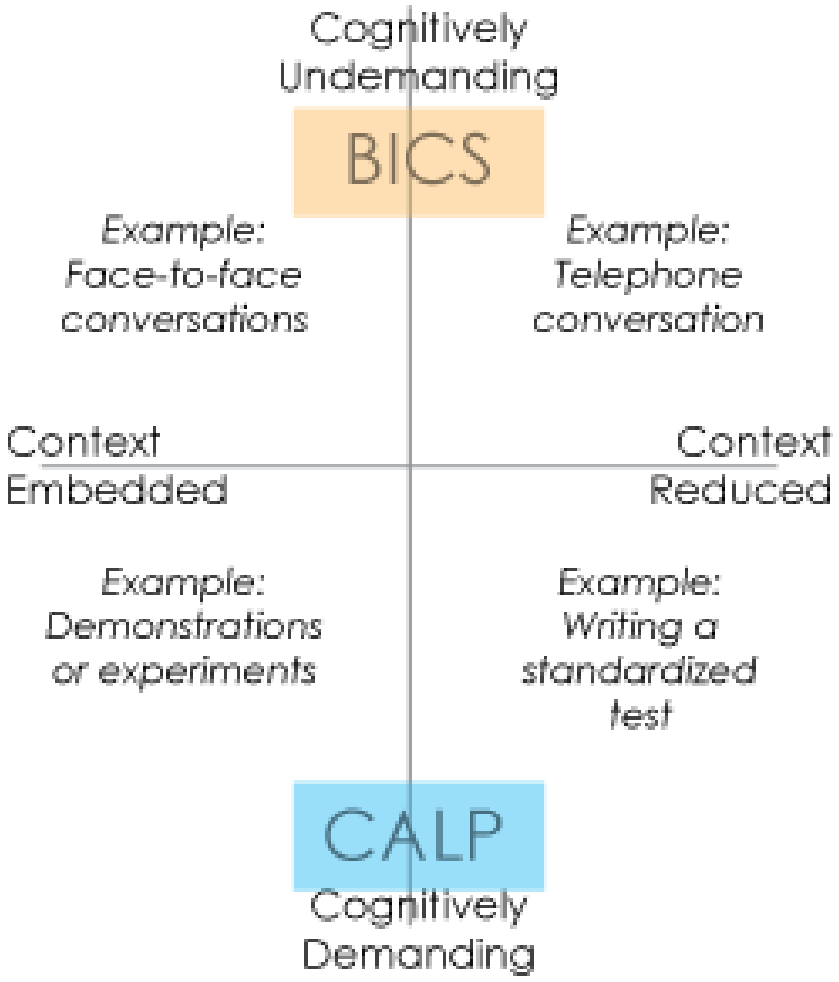
Figure 3.2: Cummins' threshold theory and (not-)balanced bilingualism

Figure 3.2 depicts how the threshold theory supplements the understanding of the interdependence hypothesis theory. This theory further explains how the varying levels of language proficiency in a learner's L1 and L2 influence cognitive functioning. It is argued that there are specific proficiency thresholds which impact cognitive processing in three ways; negatively, neutrally and positively. Should both languages be insufficiently developed (below the first threshold), processing is negatively impacted. If a learner is proficient in one or the other language, there is no impact on cognition. For learners to achieve to their highest ability academically, it is suggested that they should be above the second threshold and show proficiency in both L1 and L2. Once again, within the South African context, the majority of school-going learners have not achieved, and are unlikely to achieve, this level of proficiency in the current education structure / system.

BICS/CALP

BICS/CALP distinguishes between communicative language and academic language, as depicted in Figure 3.3 (BICS: Basic Interpersonal Communicative Skills; CALP: Cognitive Academic Language Proficiency). The cognitive and contextual demands are very different for these constructs, differentiating them between social and academic contexts. Essentially, school-going learners are required to become proficient in CALP in order to achieve academically and understand the complex concepts and ideas in the curriculum, as they are associated with higher-order cognitive functioning and contribute to the largest portion of the COS

previously discussed (Cummins, 2008; Cummins & Yee-Fun, 2007). Therefore, in order to progress successfully through the education system (especially for South African learners), it is essential for learners to achieve the necessary proficiency level (CALP) in the L2.



(Baker, 1993; Cummins, 1979, 1992; Fanson, 2009)

Figure 3.3: Cummins' depiction of BICS and CALP

3.2.2 Vygotsky's theory of language-as-tool through mediation

As Vygotsky's theory of development has had a profound influence on some members of the team, it would be useful to elaborate on it. Vygotsky's ideas, also known as Cultural-Historical Theory (CHT), and in some extensions as Cultural-Historical Activity Theory (CHAT) views language as a tool for thinking. In contrast with other language paradigms that see the functions of language as consisting of the expressive/emotive, poetic, phatic and communicative/rhetorical functions, Vygotsky claimed that language also has a cognitive or self-regulative function. In other words, there is a fifth function of language, namely its use as a mental tool to act upon reality, in much the same way as physical tools are used in labour activities. Vygotsky developed this idea in opposition to Piaget (1926) who regarded the communications of very young children to be communicatively deficient and symptomatic of their immaturity or "egocentricity", as he termed it. Language, according to Piaget, may at most accompany a child's activity when she talks to herself in problem-solving or play, and have only an affective role, but such self-talk, he claimed, does not play a role in solving problems. Vygotsky (1934) countered Piaget by empirically demonstrating that

children solve problems with the aid of speech, and moreover this self-talk was an "internalisation" of talk they had first encountered in their own dialogues with adults, usually their parents or other care-givers.

Educational applications and/or implications of Vygotsky's theory

Three areas in formal education that Vygotsky's theory connects up with are: i) "language across the curriculum (LAC); ii) language as subject (LS) through a "language-acquisition approach" to teaching a second or foreign language; and iii) mother-tongue-based bilingual education (MTBBE).

Vygotsky's speech for regulation in problem-solving plays either a main or complementary role in these three areas driven by the pioneering work of Barnes (1969; 1976), Prabhu (1987), Cummins (1996) and Alexander (1999), over time.

An impetus from the classroom-centred research was Barnes' (1976) concept of "exploratory speech" inspired directly by Piaget and Vygotsky's view of speech as a symbolic representation of activity in the minds of children. Barnes applied his concept to classroom data and transcripts of school learners in Britain to show rich examples of "exploratory speech", in some instances of group work and teacher-led interactions embedded in the "hidden curriculum" and most often ignored in the overt curriculum. Barnes' empirically-supported Vygotskian approach is an attempt to persuade teachers working across the curriculum to perceive themselves as language teachers in addition to being content specialists. However, Barnes was not promoting the idea of the conventional language teacher but one who would recognise the Vygotskian concept of language-as-a-tool to do thinking. This is a constructivist view of learning, based on the need for learners (and teachers) to think their way into content/knowledge, by using language / speech / interaction as a means to appropriate content, or to use Piaget's own terms, to "assimilate" knowledge, i.e., to make knowledge one's own. Vygotsky's concept of language-as-tool is most widely known in educational circles today as the concept of "mediation" in the zone of proximal development (ZPD), where learners are assisted – through mediation – by teachers or capable peers, to solve problems higher than their existing level of competence.

Prabhu (1987), as well as Krashen (1981), contributed key ideas for how a second / foreign / additional language can be "acquired" (in contrast to being studied consciously). Prabhu saw a connection between his task-based syllabus and Vygotsky's concept of adults' responsive mediation (through language) of learners' cognitive efforts. In the task-based syllabus, learners' minds are challenged by problem-solving tasks based on reasoning-gap activities. Teachers deploy the target language (which is often English in third-world countries) and learners grapple to comprehend because they are most receptive when they need the language for meaning-making. Prabhu's five years of research in Tamil- and Kannada-medium government schools in southern India revealed that of the three kinds of cognitive tasks he experimented with (information-gap activities, opinion-gap activities and reasoning gap) only reasoning-gap tasks made a productive cognitive and linguistic demand on learners in terms of the goal of acquiring an additional language.

In the third area – MTBBE (Alexander's term for additive bilingual education) – Cummins showed the relevance of Vygotsky in an important footnote in his book (1996, p. 26). Cummins distinguished between two kinds of language competencies needed by learners in formal education, namely, Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP). Cummins added a cognitive spectrum to the language spectrum, namely, an axis moving from "cognitively undemanding" to "cognitively demanding" thinking (Cummins 1996, p. 57). The synthesis into one framework of the X axis of language variation with the Y axis of cognitive variation (see Figure 3.3 too) gives us his four quadrants of language and cognitive competence, in which quadrant B shows the intersection of "Context embedded"

language (BICS everyday language) and “Cognitively Demanding” cognition (CALP). This is identical to Vygotsky’s concept of language-as-tool for thinking. The four quadrants model is not only an elegant framework that permits us to map the relation of language variation to cognitive variation. Cummins’ four quadrants model also enables us to identify various classroom practices such as “dumbing down”, “rote learning” and “safe-talk”, as well as resources for learning such as code-switching and translanguaging.

3.2.3 Bi-/multilingualism and (the role of language in) cognitive development

Besides the very broad scope covered by psychological explanations of language processing, or less broadly, mastering the linguistic features of language, there remains a narrow interest in the cognitive processing effort that learners have to apply in the process, including what teachers do or do not do to bring about sufficiently proficient cognitive processing. This form of psycho-linguistic approach (Prabhu, 1987; Krashen, 1981), as elaborated on later in Section 3.3, where choices are motivated in relation to the analysis framework adopted for our study, and as briefly referred to a few paragraphs before, is based on Prabhu’s reasoning that learners achieve poorly in language because of gaps in their cognitive processing capabilities, especially those related to problem-solving. These would hamper how learners process language information, reason about language, and form their own opinions about language proficiency (i.e., correct/optimal language use).

A strong new literature from the perspective of cognitive neuroscience has been developing since the turn of the millennium. Herschensohn (2007) explored the link between age, on the one hand, and language acquisition and development, on the other hand. She accounted for first- and second-language acquisition in relation to the question about critical periods and invariant stage sequences. She reviewed a vast store of evidence, often based on functional magnetic resonance imaging (fMRI), but also empirical research articles. This allowed comparing language proficiency levels among individuals before and after suffering brain trauma, (not) having suffered trauma, and from cases of non-typical development. Biological maturation, age constraints and first-language acquisition and development are tightly linked. Much of this hinges on the phenomenon of brain plasticity being very strong in the early years. Thorough acquisition coincides with onset before age seven, with severe deficits on onset after 12. Oral competency development patterns and timeframes at this switching point dovetail with literacy development that may show more variables patterns, but is nevertheless based strongly on the first seven years. Innate predispositions as well as environmental factors are both accounted for. Evidence and argument support progression from phonology through lexicon (vocabulary), syntax and morphology. Effects in relation to learning a second language after a first are indirect and spread over a wide range of variation in relation to individual circumstances, motivation, onset into adulthood, and varied end-states (proficiency level outcomes).

Neural networks, brain architecture, the functioning of working memory, higher-order processing and cognitive development are essential themes in Abadzi’s (2006, 2014) contributions. These elements may all in essence be biologically determined, if not strong innate residues from evolutionary human development. They are the main mechanisms determining language and literacy acquisition and development from the earliest years to academic and conceptual proficiency at the end of formal schooling and into the workplace or post-school learning. Abadzi also makes it evident that insufficient exposure and stimulation to language fail children from poor societies in addition to the rest of poverty’s damaging effects and detrimental circumstances playing havoc in the form of low birth weight, stunted growth, nutritional deficiencies, parasitic infections, undetected auditory problems, parental illiteracy, and related behavioural ramifications linked to mobility, access and financial means. Frequent exposure to many words, automation of decoding, and mastery of basic morphological language structures are some of the prerequisites for

reading fluency, which in turn determines comprehension and academic proficiency all along; merely as a function of how the brain, memory and central executive processing works.

One of the leading academics on this issue[5] is Bialystok (Bialystok, 2011; Bialystok, Barac, Blaye & Poulin-Dubois, 2010; Bialystok & Craik, 2010; Bialystok, Craik, Green & Gollan, 2009). She focuses on the influence of bilingualism on one's cognitive functioning. In order to determine the impact that bilingualism has on learners' processing abilities, she and her co-researchers compared bilingual learners' cognitive functioning with that of their monolingual counterparts. Bialystok argues that the use of two languages (bilingualism) does impact cognitive processing, especially non-verbal functioning, and bilinguals are reported to have an advantage over their monolingual counterparts. She further argues that bilinguals are better able to manage their language performance, which consequently positively influences aspects of a learner's cognitive abilities. Acquiring an additional language is thought to allow bilingual learners further flexibility during cognitive processing. Bialystok argues that the processing of two languages assists during more complex tasks, especially within the executive functioning. More importantly, Bialystok highlights the positive cognitive outcomes, should learners become proficient in both languages from an early age. The review by Higby, Kim and Obler (2013) of research over the preceding decade summarises the most recent evidence on the impact of multilingualism on the brain.

As an outflow from a discussion at some point within the team about integrated language learning, it was also acknowledged that the task of merging a wide range of knowledge resources, such as the abundant and sophisticated theoretical positions being introduced here, classroom realities, policy, etc., into an intervention strategy or set of solutions at system and individual teacher level, will not be easy. Language teaching didactics' role in teaching and learning will stand at the core of such an effort. Be it as it is, some examples are provided next to illustrate how we should or could attempt to relate the theories and models we are being exposed to, to our South African realities, including GPLMS, CAPS and school practices already shaped by these.

Current realities in relation to the varied language resources that learners and teachers bring into rapidly changing classrooms in inner-city and large urban township schools necessitate further careful consideration of the appropriateness of the conceptual lenses one uses for looking at these situations. Complex language encounters are identified, defined and described well by Evans and Cleghorn (2012) within a South African perspective. Their work includes the notion of translanguaging, and resonates with similar work in multilingual neighbourhoods and schools in other big cities in the world, with the experiences of Busch (personal communication, 2012: to Prinsloo) in Vienna being very typical. Also Plüddemann (2011) contributes much to this topic, especially in terms of the interaction between concepts (and behaviours or practices) related to assimilation vis-à-vis language diversity. Be it as it may, Evans and Cleghorn focus on the linguistic diversity present in current city classrooms as an artefact of the historical conditions shaping it through present challenges and opportunities. The diversity can also be seen as the outcome of dynamic and fluid interaction between worldviews, global change, language policy (and politics) and classroom pedagogy. Put differently, language (as subject, as medium of instruction and as individual or personal communication vehicle of teachers and learners) intersects with pedagogy and politics (including policy) in the classroom. The socio-economic and demographic features of role players and stakeholders are included in such a conception. After 20 years of school and curriculum reform, and under mounting pressure to show tangible education quality improvement, Evans and Cleghorn describe the present status of language teaching and learning in schools in view of the forces that have been shaping

[5] Information for this paragraph was mainly produced by Rogers on the basis of the literature review underpinning her doctoral studies.

it, but are also already pushing it in certain new directions. The richness of current language (linguistic) and cultural realities is perceived either to overwhelm teachers or to empower them. This is happening across the divide of experience and training - new vis-à-vis traditional (dated). Sometimes young / new teachers understand the task better. Sometimes the skills and experience of seasoned teachers prepare them better for consistent, good daily teaching in the classroom. The insights and discussions are all topical and practical because the data were collected through extended and careful lesson observation and teacher interviews. One of the central tasks that the education system has to succeed in is bridging key social, cultural and linguistic gaps and divides between learners and teachers in the classroom. To this effect, a change of emphasis away from overly rigid recipe-like teaching towards the flexible used of variable mixes of language resources is advocated.

Another possible illustration of an approach at classroom teaching level that would factor in how complex language situations could be dealt with practically and by using all the language resources available, would be the consideration of "multiple bi-literacies" as advocated by Owen-Smith (2011, 2012, 2013). According to this approach, every learner brings mother-tongue (and additional-language) proficiencies and a home-language context into the classroom, according to his/her unique situation. Each such resource combination may overlap with the resource combination/s of no, one or any number of other learners in relation to their home language/s. In the classroom, the common denominator is the link of each unique home situation to the official language of instruction. Because of how the latter is twinned with at least one other home language, either across some learners who has that in common, or mediated to more language resources through some learners who are exposed to more than one additional or home language, the possibility and ability is opened for learners and the teacher to draw on multiple resources beyond a language that can necessarily be understood by some of the learners, or the teacher. Specific teaching techniques, such as bilinear or multilinear learning materials, learner products, etc., can as a result be mobilised in class. Benson's work (2000, 2004a, 2004b) is of much relevance as well in this regard.

The local experiences of South Africa can easily be situated further within international experience, such as that reported by Yaman_Ntelioglou, Fannin, Montanera and Cummins (2014), on the basis of work in a Canadian inner-city school. Descriptive writing, creating multiple texts, multilingual and multimodal classroom practice all feature strongly in their contribution.

3.2.4 Epistemic versus ecological approaches to curricular content

Another scholarly conversation worth mentioning relates to whether a curriculum should aim at epistemic access to existing privileged forms of knowledge/ cultural capital, as argued by Bourdieu (1991), Janks (2010) and Vygotsky (1934), or whether the aim should be to affirm the cultural identity of learners based on an ecological approach, advocated by scholars such as Hornberger (2003b) and Pennycook & Makoni (2006). The first of these is largely influenced by sociology, and cultural-historical developmental theories. The second, namely the ecological approach, draws upon anthropology and sociolinguistics for their description, but uses postmodernism and postcolonial theories for their ideology. While the two positions exist in the published literature, it would be an exaggeration to claim that there is a debate between them, or that scholars upholding these positions would perceive themselves as belonging to a particular paradigm. They would more likely feel uncomfortable about being pigeon-holed into a particular paradigm. Our representation of the scholarly research in terms of paradigm differences is therefore our own perception, but one that is extremely significant for educational change. Moreover it is a difference that we believe needs to be debated, as the current absence of a debate perpetuates confusion among educationists about the epistemic goals of education in relation to these paradigms.

Broadly speaking, then, the difference is about knowledge claims. More specifically, what kinds of "knowledges" deserve to be given a status in formal educational curricula? The sociological view emphasises the right of the excluded majority of learners from marginalised backgrounds based on race, class, gender and nationality, to have access to privileged forms of knowledge such as modern science, rational thought, scholarly texts, academic discourse, etc. The anthropological view sees such "modern" forms of knowledge as abstract, western, middle class, and patriarchal, and based on a representational view of knowledge that automatically favours a transmission pedagogy. The anthropological view favours the diversity found in the everyday lives of the communities from which learners come. They see diversity as not only a resource for maintaining identity against the "hegemonic" modern epistemologies (and the western languages in which they are encoded). They see modern epistemologies as historically displacing local knowledges, which includes what is recognised as Indigenous Knowledge Systems (IKS). They argue that these local knowledges must be preserved by including them as part of curricula. This identity-cum-epistemic status to local knowledges has been referred to by Janks (2010) as the "celebration of diversity" position that she disagrees with, on the grounds that, if curricularised, it would lead to the ghettoisation of learners, which in the South Africa context would be the African-language speaking learners.

Our team of researchers tended to align ourselves with the "cultural capital" position against the "celebration of diversity" position. However, rather than seek closure, the team felt it was perhaps more important to salvage the difference as an important topic for scholarly discussion. The team saw value in foregrounding the tensions between cultural identity and epistemic access, and their close connection to everyday knowledges and scientific knowledge as topics for scholarly discussion that must precede educational change based on empirical research. Interestingly both paradigms believe their epistemological claims lead to learner empowerment, despite their almost polar epistemological positions. But because of the psychological damage done to the psyche of African people by colonialism, apartheid and its disguised continuance in post-apartheid South Africa, these research paradigms are often advocacy-driven and emotionally-laden making intellectual discussions around differences difficult to pursue.

A rather self-evident point, but extremely elusive to align with optimal literacy and language acquisition and development among learners during the first three to six years of formal schooling, is the professional role and proficiency of language teachers[6], didactically speaking. This transcends their mere, but very competent, mastery of the phonological, lexical, syntactical, grammatical, morphological, prosodic and other linguistic features of the school languages *per se*. It also largely transcends being able to teach the language/s effectively and well in terms of language didactics and pedagogy. What the previous statements refer to is teachers' knowledge of how learners' minds acquire and process new concepts. It even seems as if this topic warrants a parallel or mirror study and description of paradigms of teacher professionalisation and development.

Good teachers need to have acquired the requisite knowledge and proficiencies. Besides understanding how learners acquire and process new concepts, teachers also need quick ways to establish which processing capacities learners have already mastered, and which ones not. New (language) learning

[6] There are many more issues underlying the topic of teacher roles and proficiencies. South African legislation and regulations (such as the "Recognition and evaluation of qualifications for employment in education 2000", retrieved 20 April 2015, http://www.education.gov.za/LinkClick.aspx?fileticket=RrtReIvj7AY=y) set out the seven teacher roles (learning mediator, materials designer, leader/manager, scholar, pastor, assessor, specialist). Elsewhere in the report, at various appropriate places, references are made to specific teacher-training contents that may serve to address any lack of proficiency in teaching reading, literacy and language among teachers. All of the foregoing should be linked to current debates in the country on teacher knowledge and professionalism, in particular in relation to content knowledge, pedagogic knowledge and curriculum knowledge (NEEDU, 2013; Hugo, 2011, 2014; Muller, 2012; Shalem & Slonimsky, 2013).

contents need to be presented and reinforced to each child according to that child's current ability to detect and put to action existing conceptual contents, patterns and links. At the same time teachers should be able to detect if the conceptual learning task of the moment took place successfully and to build learners' conceptual toolkit for mastering the next imminent learning and processing challenges. Teachers should understand the differences between naturalistic and structured processing, and between direct (experiential) and abstract knowledge, which undergo such profound changes around the years when children start school, when they are required to add literacy skills to their oral skills. With multilingual abilities and tasks at stake, it becomes even more complex for teachers to pitch new language learning contents appropriately in relation to learner's abilities. The main reason for this is likely to be that learners may be at different levels of conceptual readiness and proficiency in relation to their different languages, which may at certain stages threaten to undermine each other's development, if not that of conceptual progress. For some conceptual development, especially among early learners, relying on language may not be an available option for their language teachers. In addition, the higher the order of the language contents, knowledge and processing, as well as the conceptual tasks, the more remote will the possibilities and value become of using elementary early-years learning (and teaching) techniques. In summary, for learners teachers all along have to become facilitators[7] not of acquiring direct knowledge content, but of internalising concepts, while throughout staying aligned with learners' foundational knowledge and skills and the mode in which they are able to learn.

3.2.5 Taxonomies related to language teaching and learning

A useful way of getting a brief overview of paradigms of literacy and language teaching and learning was considered to be to select and outline informative taxonomies offered lately by scholars. It may be difficult at points to distinguish between paradigms and conceptual frameworks, or even other descriptors, as will soon become evident. A systemic review, as suggested elsewhere, will most likely be the best avenue at present for providing a comprehensive and coherent classification and description of such paradigms or clusters of paradigms. However, no watertight and mutually exclusive categorisation is expected. For this reason, the suggested review should accommodate detailed additional description of the features of paradigms (or approaches), much like Richards and Rodgers (2001) did it, in relation to:

- Specific theoretical underpinnings:
  - theory of language
  - theory of language learning
  - theory of language teaching (if it is separable from the previous item)
  - content (syllabus/curriculum) specification
- Classroom procedures:
  - input
  - interaction
- Critical assessment

In all of the above, the necessary distinctions, as relevant, should be made between: (a) paradigms and theory; (b) methods and methodology; approach as method and technique; approach as design and procedure; and (c) principles and procedures.

Much material is available on the conceptual, theoretical or paradigmatic underpinnings of typical language and literacy[8] acquisition and development, and its formal teaching. Concepts and terms such as the ones

[7] Contents for this paragraph were provided mainly by Pat and Andrew Murray of siyaJabula siyaKhula, based on inputs at a working seminar, on the basis of their learner-regeneration approach to (remedial) language teaching.

[8] See further explanations towards the end of Section 3.4.1 on the present study's approach to theories of language and literacy development, respectively, and the analysis framework the study adopted.

that follow may each involve and require comprehensive review by virtue of their integration of paradigms, theories, conceptual frameworks, principles and approaches. They also arguably may belong to broader schools of thought, as categorised next.

- Social constructivism and related thinking:
  - communicative language teaching (Eisenchlas, 2010);
  - narrative language pedagogy (Warford, 2011);
  - social-or socio-constructivist approaches
  - socio-cultural or cultural approaches (Kolodkina & Tan, 2008; Magnussen & Stroud, 2012);
  - conversational and authentic conversational approaches
  - speech-act framework, and pragmatics (Bardovi-Harlig, 1996);
  - English-as-culture and peda-linguistic approaches (Eoyang, 2003)
- Socio-linguistics
- Applied linguistics
- Structural linguistics and related thinking:
  - structural linguistics proper
  - inter-language approach (Cheatham & Ro, 2010)
  - grammar-translation approach or pedagogy
  - structural approach / analysis
  - transformative generative grammar [original contributions by Chomsky (1959) and/or De Saussure (1959), and generative linguistics / grammar (Marantz, 2005)
- Psycho-linguistics, cognitive neuroscience and neuropsychology:
  - psycho-linguistics proper
  - cognitive neuropsychology
  - cognitive neuroscience of language (Marantz, 2005; Schumann, 2006)
  - cognitive neuroscience of semantics[9] (Pylkkänen, Brennan & Bemis, 2011);
- Other:
  - post-linguistic paradigm (or just post-paradigm era or condition[10])
  - discourse analysis
  - semantics.

Ruiz (1995) wrote a kind of review article aimed at examining theories of literacy development in preparation for a case study that would document and analyse the role of:

- written products,
- writing forms, and
- phoneme-grapheme relationships,

in becoming literate.

[9] Recent developments since 2012 in relation to literacy and cognitive development, for example as found at sites such as the Internet Encyclopedia of Philosophy, is known as "theory of mind" contributions (a branch of cognitive science). Rubrics and topics that will be found there include: theory-theory (including child-scientist theory, modularist theory-theory, and first-person mindreading along with theory-theory); simulation theory (as simulation with and without introspection, and in low-level mindreading); and some understandings of social cognition (without mindreading).

[10] Also see Nelson and Kern (2012).

Authors have increasingly attempted through reviews to group similar approaches or paradigms into conceptual or period-based clusters. Miller (2012) classifies those having undertaken studies over the preceding 15 years by paradigm into:

- generativists,
- emergentists,
- psycholinguists, and
- neurocognitivists.

In a much earlier attempt Bangura (1996) classified the American history of language instruction from the early 1950s into three main theoretical approaches, being:

- structural analysis of language;
- the notion of deep structure; and
- lexico-semantic theory.

However, some overviews with regard to taxonomies of language teaching / acquisition span much longer timeframes and provide more comprehensive overviews, such as the one by Richards and Rodgers (2001). They classify approaches to and methods in language teaching in the following way:

I. Major 20th-century trends (in a way the classic and traditionally widespread approaches) – These comprise the:
   - grammar-translation method;
   - Reform Movement;
   - direct method;
   - oral approach and situational language teaching; and
   - audio-lingual method.

II. Alternative approaches and methods (with varied support at different places and times; having developed over the previous 30 years as alternatives to the former grammar-based approaches and methods; and striving for authentic communication in the classroom from a language-as-communication perspective) – These include:
   - the total physical response method[11];
   - Silent Way;
   - community language learning;
   - suggestopedia;
   - the whole-language approach;
   - multiple intelligences[12];
   - neuro-linguistic programming;
   - the lexical approach; and
   - competency-based language teaching.

III. Current communicative approaches (the new mainstream?) – These include:
   - communicative language teaching;
   - the natural approach;
   - cooperative language learning;

[11] Also see Salies (1998).
[12] Also see Truax, Sue Fan Foo & Whitesell (2004).

- content-based instruction;
- task-based language teaching; and
- the post-methods era.

Larsen-Freeman (2000) proposed a similar description, without an overarching classification as above, and dealt with the following:

- the grammar-translation method;
- the direct method;
- the audio-lingual method;
- the silent way;
- desuggestopedia;
- community language learning;
- total physical response;
- communicative language teaching;
- content-based, task-based, and participatory approaches[13]; and
- learning strategy training, cooperative learning, and multiple intelligences.

Kumaravadivelu (2006) made two additional contributions to the foregoing classifications and the descriptions of the listed "approaches".

- First, he situated his exposition deliberately within the context of the second-language acquisition[14] of English.
- Second, his overview is integrative in the broadest possible sense, because it accounted well for the historical periods of development of the various approaches, and provided a critical evaluation of the relationship between theory, research and practice.

He also put forth argument of why and how recent perspectives have resulted in the present "post-method" condition. As a result, his presentation includes:

- An orientation covering three themes:
  - (i) language, to explain its systemic, discoursal and ideological orientation[15], as part of his presentation of theoretical concepts and pedagogical precepts about competence, knowledge and ability;
  - (ii) learning, to describe input and the intake factors and processes governing (adult) second language learning in formal contexts; and
  - (iii) teaching, to explain how classroom language has to be modified in order to provide learners with accessible and acceptable linguistic input, and also to describe various types of interactional activity that would promote comprehension in order to lead to acquisition.
- A classification of practices into three groups of methods:
  - method and methodology;
  - approach, method and technique;
  - approach, design and procedure;

  each constituted by:

[13] Originating from the work of Paulo Freire in the early 1960s, but only becoming formalised in the 1980s.
[14] Much recent literature cover the differences between first- and second-language acquisition, and the age or critical / actual periods during which each typically happens, as overviewed by Herschensohn (2007), for instance.
[15] Or put differently, language as system, language as discourse, and language as ideology.

- Principles and procedures, being:
  - language-centred methods, such as the audio-lingual method (in America, paralleling the structural-situational method in the United Kingdom), with their principle concern with linguistic forms / structures;
  - learner-centred methods, such as communicative language teaching, with their principle concern with the needs, wants and situations of learners; and
  - learning-centred methods, such as the natural and communicational approaches, with their principle concern with the cognitive processes of language learning.

  The third sub-group developed further during the 1980s when (after) various proponents experimented with approaches such as the comprehension approach, the proficiency-oriented approach, the lexical approach and the process approach.

  Discussion of a range of "new methods" (also called "designer nonmethods") then follow, all advocating a humanistic approach to language teaching/learning. These methods include:
    - community language learning,
    - the silent way,
    - (de)suggestopedia and
    - total physical response.

  Task-based language teaching is seen as another (later) reaction that followed when the novelty of the communicative language teaching approaches started to wane. The complexity of the interfaces between approach, method and techniques is illustrated when observing that the tasks belonging to the level of techniques could be language-, learner- or learning-centred tasks.
- A discussion on the condition, pedagogy and predicament of post-method perspectives:
  In terms of the post-method condition, Kumaravadivelu points out how recent critical thinking questioned the nature and scope of method, not only in terms of contents and quality, but also (and especially) the concept of method itself. It is claimed that the language teaching profession has arrived at a point where it got caught up in an endless search for an unavailable solution (e.g., for the one and only correct or best way to go about the task). The resulting call is to end the repetitive cycle of repackaging the same ideas. The restart should happen outside method, hence the post-method (or could it be "a-method"?) position or condition.

  After exploring the meaning and myth[16] (and therefore also death) of method (also through distinguishing between method as construct and methodology as conduct), the logic of a post-method perspective (or condition) is argued. The essential implication and claim of this is that teacher education has to be reconfigured by eliminating the petrified / reified relationship between theory and practice, especially along new pedagogic parameters[17] and with new indicators[18].
- Three frameworks as part of the (proposed) post-method pedagogy, being the:

[16] That: (i) there is a best method; (ii) method is the organising principle for language teaching; (iii) method has universal and a-historical value; (iv) theorists conceive and teachers consume knowledge; and (v) method is neutral, without ideological motivation (with method actually entrenching scholastic, linguistic, cultural and economic marginalisation).

[17] That account for particularity (a particular group of teachers teaching specific learners pursuing a particular set of goals in a particular institutional context within a specific socio-cultural milieu), practicality (teachers' own enquiry, professional theory, effectiveness and meaning making) and possibility (*a la* Paulo Freire, in terms of empowerment and equity).

[18] Which identify the functions and features of the roles of the post-method learner, teacher and teacher trainer / educator.

(i) three-dimensional framework, originally attributed to Stern, abandoning the method concept and opting for a strategy concept concentrating on strategies and techniques (practical action) across three dimensions, being
    a. intralingual-crosslingual,
    b. analytic-experiential and
    c. explicit-implicit;

(ii) exploratory practice framework, introduced by Allwright, encouraging teacher-researchers to shape their own understanding and practice as they go, based on a number of uniquely defined underlying principles[19] and practices[20], and making much of collegiality (the notion of a crude loop diagram progressing from global thinking, to local action and local thinking, and back to the beginning, is also accepted); and

(iii) Kumaravadivelu's own macro-strategic framework, developed through his cultural studies in post-structuralism, -modernism and -colonialism, putting forward broad operational guidelines (or guiding principles) in the form of macro-strategies[21] linked through the pivotal pedagogic parameters of particularity, practicality and possibility (as before), and posing that any number of micro-strategies, or classroom procedures, would be designed to realise the objectives of any macro-strategy.

Kumaravadivelu concludes that the post-method predicament lies in its resistance against changing (abandoning) the concept of method, especially pedagogically and ideologically, although local awareness may still facilitate particular developments.

Although dated, Ling[22] (1978) developed a model of speech development[23] specifically for situations where impairment exists. It may still produce important information on the sequence of acquisition of language and literacy skills in speaking. Broadly put, minute incremental steps as well as partly parallel development are indicated along the following broad steps of progress (each broken down in many more sub-items):

- mere vocalisation (the use of voice),
- voice patterns (related to gross control of duration, intensity and pitch),
- long vowels and diphthongs,
- consonants (step / level 1),
- short vowels,
- consonants (step / level 2),
- consonants (step / level 3),
- vowels with the soft/inaudible "r" colour,
- consonants (step / level 4) requiring distinction between voiced/voiceless sounds,
- initial consonant blends, and
- final consonant blends.

[19] Prioritising quality of life; working primarily to understand language classroom life; involving everybody; working to bring people together; working also for mutual development; integrating work for understanding into classroom practice; and making the work (effort) a continuous enterprise.
[20] Identifying a puzzle (the *why*, rather than *how* of it); reflecting on it; monitoring it; taking direct action to generate data; considering the initial outcomes and adjusting what is done next; moving on; and going public.
[21] Maximise learning opportunities; facilitate negotiated interaction; minimise perceptual mismatches; activate intuitive heuristics; foster language awareness; contextualise linguistic input; integrate language skills; promote learner autonomy; ensure social relevance; and raise cultural awareness.
[22] His latest book published is "Speech and the hearing impaired child: Theory and practice" (2002).
[23] Speech and language development may be such different processes, though, that comparing them is not meaningful.

For describing the normal developmental sequence of expressive language, the model of Lahey (1988, pp. 186-187) would be as comprehensive, realistic and useful as any other

From iterative discussion of many of the proposed conceptual, theoretical, paradigmatic or taxonomic schematic structures, and many of their components, while always trying to keep classroom realities pertaining to the experience of both teachers and learners in the South African situation in mind, the research consortium all along moved towards the adoption of an analysis framework to underpin the study.

3.3 Adopting a three-part analysis model for the empirical work of the project

The research team adopted a three-part analysis model for the empirical work of the project, namely:

- Classroom discourse analysis using the I-R-F[24] pattern established by Sinclair & Coulthard (1975)
- The level of cognitive challenge in teacher questions and the tasks designed by teachers (in relation to thinking and reasoning, inferential thinking and information processing), as emphasised by scholars such as Barnes (1976), Prabhu (1987) and Cummins (1996)
- The conceptual (epistemological) gains made by learners (in relation to every-day and scientific / school knowledge) emphasised by scholars such as Vygotsky (1987), Bourdieu (1991), Bruner (1986) and Hedegaard (1990).

According to Wegerif and Mercer (1997), a sociocultural analysis of discourse focuses on the use of "language as a social mode of thinking", that is, as a tool for advancing cognition, constructing knowledge, creating joint understanding and tackling problems collaboratively. This assertion suggests that dialogic processes in classrooms are crucial to understanding how discourse facilitates meaningful learning, and how different types of talk facilitate concept and cognitive development.[25]

Frameworks for analysing cognitive challenge and for exploring the relation between language use and cognition are not pervasive in the South African research literature on language teaching / learning and literacy development. Therefore, components of particular relevance to the analysis model that the team was busy refining at this point, are discussed below on the basis of two frameworks that we have found particularly useful. (Deliberate repetition of some information was tolerated to aid the flow of argument.)

3.3.1 Cummins' Four Quadrants framework

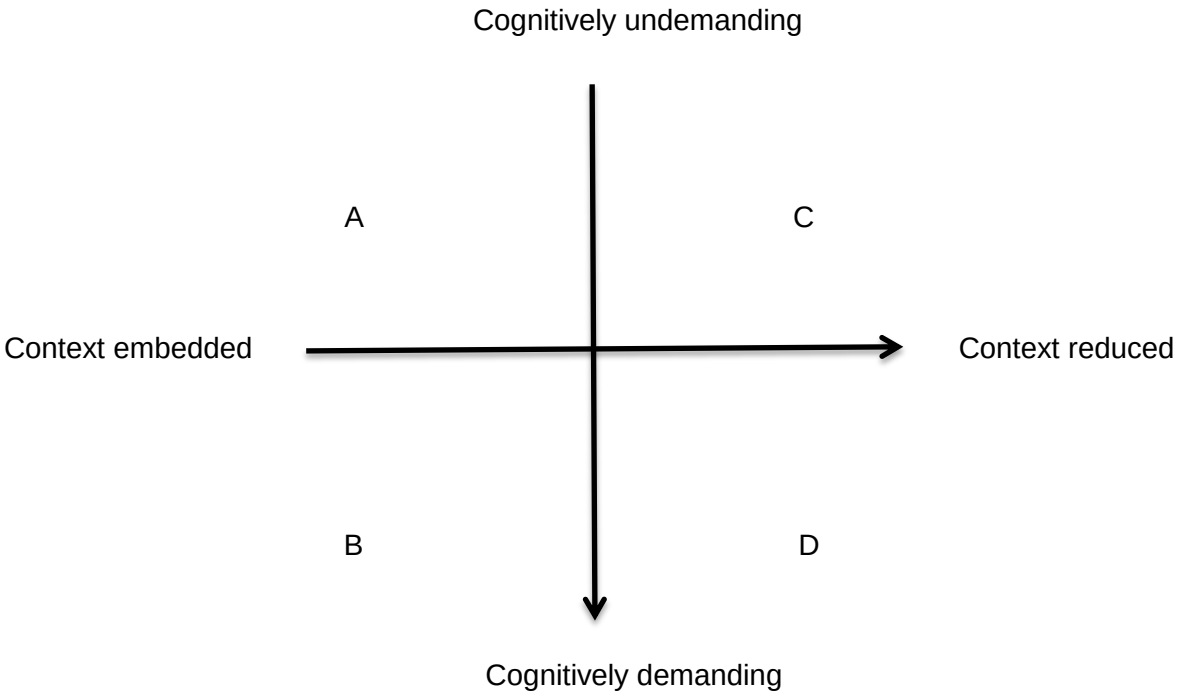
Cummins' distinction between BICS and CALP is central to this discussion. BICS refers to conversational fluency in a language while CALP refers to students' ability to understand and express, in both oral and written modes, concepts and ideas that are relevant to success in school (Cummins 1984).

This initial BICS/CALP distinction was further elaborated by Cummins into two intersecting continua (Cummins, 2008) that highlighted the range of cognitive demands and contextual support involved in particular language tasks or activities during learning. In the Cummins' framework, context is represented on the horizontal axis of the framework while the cognitive effort required by learners to engage in the

[24] Initiate/initiation – Response – Feedback. The so-called I-R-F structure of classroom interaction is based on a discoursal approach, and was emphasised by scholars such as Sinclair, Coulthard, (Sinclair & Coulthard, 1975), and others (e.g., Sachs, Harvey, Wells and Allwright).

[25] Observing and analysing literacy and language events according to the abovementioned classroom dynamics, and three-part model, would also make it evident if the teacher followed a transmission approach (e.g., Freire) vis-à-vis a discovery approach (e.g., Piaget, Bruner, etc.) in relation to knowledge acquisition among learners. As indicated before, another distinction that may become evident is the relative prominence of the characteristics of schooling (formal) vis-à-vis education (formal and informal) within the learning and teaching interaction facilitated by teachers.

learning process is represented on the vertical axis. Context is used here to refer to the contextual support present in the communication that would support expression and reception of meaning. The framework as adopted is expressed in Figure 3.4.



(Cummins, 1996)

Figure 3.4: Framework for the development of language proficiency as adopted from Cummins

The first quadrant (A) represents BICS activities that are cognitively-undemanding and context-embedded, like everyday conversation. Quadrant C activities too would be cognitively-undemanding, but context-reduced and would involve learners copying from the board or textbook and doing grammar drills not requiring much thinking. Quadrant B is an important transitional quadrant, as learners can draw upon contextual features of the learning environment, such as teachers' actions, real objects and pictorial representations to enable understanding of cognitively-demanding content. In Quadrant D, learners are expected to carry out independently a full range of cognitively-demanding academic tasks, such as listening to a lecture, reading an academic text or writing an exam. According to the matrix, in both quadrants B and D, the kind language and communication demand are higher and also require a significant level of cognitive energy to fully participate in the communication.

Through the Four Quadrants framework, Cummins collated the conceptual processes learners undergo during language and literacy learning, thereby reconciling the language learning and thinking processes involved. Through the framework, the researchers were able to analyse comparatively both the regular and intervention lessons, in terms of the kind of cognitive demand the two kinds of teaching make on learners and to ascertain how teachers facilitate the learning of abstract and academic skills.

3.3.2 Prabhu's three types of task

Moving on to how the study conceptualised cognition, Prabhu's (1987) distinction between task types can be used to represent three kinds of thinking.

The first of the three is “information-gap” tasks, which refer to the cognitive effort required by children in any activity involving a transfer of given information from one person to another, or from one form to another, or from one place to another – generally calling for the decoding or encoding of information from or into language (Prabhu, 1987, pp. 46).

An example of an information gap would be, for instance, naming parts of a diagram, recollecting numbers and letters of the alphabet, etc. Prabhu contrasts the cognitive effort required for information-gap activities with those ones required for “reasoning-gap” tasks, which refer to any activity involving deriving some new information through the processes of inference, deduction, practical reasoning, or a perception of relationships or patterns (Prabhu, 1987, pp. 46).

Inferential comprehension and reasoning are by far the least developed of the thinking skills, precisely because they are abstract skills, and compel learners to think beyond the information available to make connections (for example, between cause and effect, or seeing similarities and differences).

Lastly, according to Prabhu’s three types of task, there are what he refers to as the “opinion-gap” tasks. Opinion-gap tasks refer to any activity involving identifying and articulating a personal preference, feeling, or attitude in response to a given situation and usually require greater fluency in language than either of the other two types of tasks (Prabhu, 1987, pp. 46).

Drawing insights from Prabhu’s framework, the researchers were interested in establishing what kinds of tasks predominate in both the regular and intervention lessons and what kinds of interactions these tasks lead to. Through the combined use of the analytical frameworks outlined above, the researchers sought to establish whether the classroom interactions facilitate learning.

3.3.3 The adopted three-part analysis framework

The analytical framework for studying classroom data emerged from our interactions around our first video footage and the transcription of a Gauteng classroom observation. The framework was perceived as comprehensive enough to give the team a common tool, yet flexible enough to allow for articulation with and between various paradigms. Each aspect of this three-part framework is sufficiently distinct (mutually exclusive), yet inter-dependent[26]. The three parts of the framework are discussed in some more detail next.

Cognitive comprehension effort required of learners

The following levels of reasoning effort, ideally beyond mere recall of knowledge, are distinguished:

- mere recall of information (multiple-choice type; single-word facts)
- responses requiring reasoning (likely to be in answer to open-ended questions)
- responses requiring opinion, on the basis of evaluation (likely to be solicited through questions about how learners would think, or make moral judgements, about issues).

[26] At one of the team’s working seminars, and afterwards in personal communication, Andrew Murray (siyaJabula siyaKhula) offered a similar understanding. He distinguished between abstract (conceptual, cognitive, intellectual, logical, rational), concrete (interaction with the physical world, including reading and writing) and human (emotion, expression, moral values, social interaction, self-concept) learning contents that are usually mediated through interaction with parents, teachers and the curriculum.

The cognitive effort applied by learners, and what teachers do or don't do to bring it about, could also be described in terms of the distinction made by Prabhu (1987) between three types of gap that (are used to) guide learners' problem-solving activities, as mentioned above.
Cummins' (1996) four quadrants of language proficiency likewise offer a framework, where the vertical axis of "cognitively undemanding" and "cognitively demanding" could be useful in classifying teachers' and learners' level of effort.

Imitative activities involve memory and must be treated as making no cognitive demand on learners and teachers, but might make other kinds of demands (e.g., linguistic, social face-saving and remembering).

Terms and management of interaction

Questions that are critical in this regard are who the initiators of interactions are, and how much response opportunity learners are afforded. The existence and operation of the so-called I-R-F loop (initiation – response – feedback) is central. Who are the actors at its various stages? Do learners ever initiate interaction? Finding answers to such and related questions leads to making an eventual call about learner- or teacher-centred education.

Useful sub-dimensions could be either: (i) intention, effort, and impact; or (ii) intention, behavioural effort and management of interaction. In applying the model, team members were required to be mindful specifically of the overlap between teacher intentions and learner outcomes.

It was left to partners to decide how meaningful time-on-task coding / analysis would be, either as a sub-component of B, or, should everything become too involved, as a fourth main dimension (i.e., a D category).

Accounting for additional elements would include the actors during interactive processes (e.g., teacher and whole class; peer interactions; teacher to individual learner; and solitary work). The management of turn-taking could be a further useful entry point, largely because it is measurable. Who nominates turn-taking? How many students volunteer to answer? Who selects turn-taking, and why? What is the implication of students not given a turn?

In relation to the I-R-F structure, a few more useful pointers were provided to team members in advance. Who "initiates" (I) the interaction, teacher or learner? What is the nature of the "response" (R), silence or speech? Does the teacher always give "feedback" (F)? In other words, is this a "routine"? What constitutes negative feedback? What constitutes positive feedback? If a teacher does not give feedback, how do we interpret that from our position based on an "ideal" education, from the teacher's perspective, and/or from the learners' point of view? How salient was implied feedback?

New concept attainment by learners

Matters at stake on this plane or in this dimension include the following: the structure of new knowledge; coherence and integration of knowledge; contextual relevance; scientific knowledge; the processes of deriving new knowledge; the range from low- to high-level literacy attainment; BICS and CALP (Cummins, 1996); and CALP oracy.

Conceptual goals and effort (the differences between every-day and scientific concepts) drive analysis when using this dimension. The framework developed by Cummins (1996), and separately by Hedegaard (1990), both of whom draw indirectly and directly respectively from Vygotsky's distinction between everyday knowledge and scientific (school) knowledge, could serve to analyse "key concepts" and whether

they are being taught. In disciplines which are established, together with their paradigms, such as the natural sciences, key concepts are easier to state. But in "pre-paradigmatic" disciplines such as the human sciences, what are accepted as "key concepts" might prove contentious. This would be even more the case for "areas" like literacy, which draw upon several different professional disciplines (linguistics, literature, education, etc.), and where declarative knowledge (knowledge about language and literacy) is not sufficient as a curricular goal, because "skills" have to be taught and these are often embedded in "processes" of learning and communication.

3.4 Self-imposed guidelines towards implementing the three-part conceptual analysis framework

A number of caveats were made by and guidelines given to[27] the research team as to how to derive the most value from applying the adopted template to our classroom analysis. These follow next.

3.4.1 Demarcating literacy

Literacy is defined as learning / achieving transfer of meaning (knowledge) through reading and writing. A definite text-basis exists. Literacy exists in the form of "any permanent record of information" (i.e., by electronic storage, print, etc.) and "means for the retrieval of such permanent information". It is also about codes and keys for retrieval and storage, and being mindful about issues related to / paths linked to coding.

Is literacy "caught" or "taught"? Special reference was made to the "choice between" the paths of phonics and emergent literacy. The study of literacy (and reading in particular) in the FP is being singled out increasingly as a key area for research. It is further important, not for the elitist reasons of the 19th century where knowledge was important for status, but for the reasons of cultural capital (Bourdieu, 1983), that in a divided society cultural knowledge needs to be redistributed and made accessible to all, including those historically marginalised from it (through gender, class, race and nationality). This egalitarian goal helped remind us of why we should be concerned with literacy in the first place, before we went into the pragmatics of research. Further, the ethics of egalitarianism that drove us should not be confused with the issue of the quality of education. It is here that the question of what was the best approach for the acquisition of literacy: a phonics approach, an emergent literacy approach, an amalgam of the two, or something else, arose.

The "phonics debate" (as referred to further hereafter, but also earlier in this report), has emerged in South Africa (e.g., Sarah Murray, Carol Bloch – personal contacts) in a theory-driven form by professionals working at the interface of university and community. Our perception of this debate changed when presented to practising teachers, who resisted the emergent literacy approach in favour of phonics. Phonics was seen not as an alternative to some other paradigm, but as an alternative to the lack of a systematic way of teaching reading, which seems to be the status quo. Is the phonics now being advocated a retreat into the teaching of discrete skills, or is it an advance towards a more integrated-skills approach? Would classroom data be able to show up differences within the phonics approach, so that teachers' critical thinking around this approach can be developed? How would professionals who uphold an emergent literacy (integrated skills) approach view a progressive phonics approach? These unanswered questions served to develop the paradigm debate, but instead of doing it in an abstract and self-indulgent manner, it focused upon classroom realities, so as to create a resource for teachers to engage in their own more practically-oriented debate.

[27] Michael Joseph, key partner in the study, was instrumental in documenting much of the contents in Section 3.4.

It was in this context that Margie Owen-Smith's[28] experiences as a teacher, bilingual curriculum designer and reflective practitioner were invoked, and her expertise drawn upon to help theorise the issue of "Phonics in the Foundation Phase (in multilingual classrooms)". Her contributions as an expert in this area also meant support for the project team's view that research should lead to transformation, not only in the post-research phase, but also as part of ongoing research processes.

We are of the firm belief that the matter of one's approach to dealing with the multitude of available language teaching and learning paradigms, or of how the team understood its research problem on that basis, should never become an either-or dichotomy. We should be mindful of how to educate in / for the 21st century. In this regard, the concept of fourth-order thinking from the science of complex systems should be noted (Harel, 1987).

The foregoing would also include overly simplifying choices between all (or nothing) of social constructivism / post-modernism vis-à-vis all (or nothing) of cognitive neuroscience. Caricaturing either should be avoided. Also, favouring strong empirical evidence bases does not automatically imply that who does so adheres to narrow positivism. In the process, the value of other large systems studying the processing, teaching and learning of language, such as the corpus linguistics approach, or conversation / discourse analysis, should also not be neglected. One should also be critically mindful if one's selected structure of conceptual understanding is equally efficient for studying additional- and first-language acquisition and development.

The current shift in policy towards "content" bears scrutiny from the epistemological perspectives emanating from the sociology of science (Kuhn 1962) and CHAT (Vygotsky, 1934; Hedegaard 1990), as well as traditional education that most teachers were inducted into, and where the "key concepts" of a discipline are specified as a "syllabus". Because of the predominance of "fundamental(ist) pedagogics" in the pre-1994 South Africa, where content was taught through a "transmission" approach, Curriculum 2005 (OBE) was brought in, but unfortunately threw out the baby (content) with the bathwater (pedagogy). This is not to suggest that content-based curricula of the past had identified key concepts as required by a strong disciplinary approach based on modern epistemology.

The team heeded a first cautionary note towards its analysis of classroom data. We needed to distinguish between interaction and cognition, on the one hand, and concept planning, on the other. Interaction and cognition seem to come under what is called "pedagogy" (teaching and learning processes); whereas "concept" planning seems to fall under what used to be called "the syllabus". Further, planning of the key concepts that constitute a syllabus seems to be an *a-priori* act, whereas pedagogy is to varying degrees unpredictable and an outcome of classroom events. Hedegaard's (1990) "double move" suggests a way for the "ideal" teacher to combine the planning of concepts with pedagogic processes.

A further cautionary note was heeded. The planning of concepts does not entail the attainment by learners of these concepts. Interaction and cognition are possibly the means by which concepts are attained, but the teachers' intention (and prior planning) to teach key concepts must also be included. The omission of teaching (or bringing about the learning) of key concepts should not be confused with cognition and interaction; advanced forms of the latter two are possible without the teaching of key concepts from the discipline. Such classrooms could be lively and be taken as good examples of learner-centredness; but they would still not be advancing knowledge, and result in epistemological impoverishment thus rejecting the

[28] Margie Owen-Smith, as manager of the Home Language Project, provided valuable information on the realities of language teaching in multilingual classrooms (see also Owen-Smith, 2011, 2013). Apart from the work of the Home-Language Project there is a dearth of work being done to develop and test multilingual methods to assist teachers in multilingual classrooms and to promote research in this regard.

goal of formal education. On the other hand, the planning and teaching of key concepts might very well be undertaken, but through a "transmission" approach, i.e., no / low levels of interaction, no / low levels of cognition. The result of such teaching, we predicted, would be a failure of learner attainment of concepts, and a display of superficial knowledge.

The pressure of teachers to teach concept / content in a way that learners can grasp it may prove (for a variety of reasons that need to be researched) too much for them, and a compromise solution has come in its place that resembles the convergence of concepts, interaction and cognition associated with good teaching and learning. The term that best captures this form of teaching and learning is "safe-talk", which has been empirically found in South African classrooms by Keith Chick, but is probably more global as extended by Hornberger and Chick's (2001) research in South America. Cummins (1992, 2008) and Cummins and Yee-Fun (2007) more brutally referred to this as "dumbing down".

As a final note on the adopted analysis framework or template, in connection with the samples of literacy behaviour that it was applied to, as it were, it was suggested at the time that any team member should feel free to add a "rag-bag" category for any observations that did not fit in comfortably in the other three analysis categories. This approach was suggested long back by the discourse analyst, Malcolm Coulthard (Sinclair & Coulthard, 1975), and is based on the criterion that a good framework must account for all of the data. But since this is not an achievable ideal, the rag-bag category is the next best thing. The framework was thus truly a heuristic device that had to be used till it has outlived its usefulness.

The course then set for the team was that local sub-groups (Limpopo and Gauteng) went ahead with analysis of existing classroom footage (video data) and decentralised working sessions using the above framework. Next, more collective meetings, or a workshop, followed for pooling our analyses, and also for revisiting and reporting on the feasibility of the framework. This effort was seen methodologically as a way of triangulating the data, and of all along improving or extending the framework, also on the basis of further data that the Limpopo group at the time still had to collect, in addition to some classroom footage from Gauteng that had already been shared and worked on by all the sub-teams (Gauteng and Limpopo).

At this stage of the interactions between all the partners from the extended research team, in particular through a specific relevant formal working meeting, a number of additional practical guidelines were identified and discussed, and set as broad parameters for data collection and analysis. These are covered in the few numbered sub-sections following further down. However, another very important reflection has to be made first on the present study's chosen emphasis in relation to the "literacy perspective" that it adopted as its research approach, both conceptually and practically (operationally) speaking.

Operationally, the scope of the study was curtailed by the labour time and funding available to it. This factor explains the different depths to which different components of the work could be taken. Conceptually, the group dynamics within the team determined that consensus was reached on the abovementioned focus and analysis approach, which can primarily be said to foreground classroom interaction and a broader theoretical context favouring language and general learning. Although the authors acknowledge the existence, value and main conceptual parameters of other points of departure and thrusts, at least one alternative route would be highly desirable. That refers to specific theories of early-literacy development, and in particular specific theoretical components related to teaching (and learning) reading and writing. However, the study could not give specialist attention in equal depth to both approaches (i.e., language and literacy). This fact is also acknowledged towards the end of the report as a methodological limitation, and indicated as an area requiring further research. The fact that such an approach would have required homing in very deeply on teaching and learning during the first four to six

months of Grade 1 only, also led the team not to abandon eventually all its earlier decisions and work that had already been structured to cover the whole period from Grade 1 to 3. For similar reasons, the transition from Grade 3 to 4 and dynamics during Grade 4 were also not focused on.

A few further acknowledgements and comments are therefore made to retain some sense of balance and fairness in order not to seem to have ignored this greater literacy perspective through mere oversight or ignorance[29]. It is not assumed in the process that models of learning in general, or language learning and teaching in particular, account for reading substantively enough and in sufficient detail. The adopted analysis framework, as above, remains a useful way to determine what kind of teaching and learning is happening in the (language) classroom, especially with regard to higher-order thinking. Further research should dovetail and articulate such a conceptual or analysis framework more deeply with reference to the development of early reading, writing and even numeracy. This applies especially in relation to the accomplishment of procedural knowledge in these areas (e.g., teaching children how to blend sounds to form words, how to form letters, how to do long division, etc.). This will also account better for how the development, and automation, of lower-order skills and procedural knowledge in the early years of schooling function in relation to more complex language learning later.

In summary, the present study could have benefited from greater foregrounding of literacy, reading and writing and going beyond the present extent to which it has dealt with the literacy event and the phonics vis-à-vis whole-language debate. It could also have included greater coverage of balanced reading instruction, for instance, and being more specific about where exactly such a balance ideally lies, and of other related prominent reading research literature in the field. Such an approach is theoretically well-informed and has consistently been recommended on the basis of strong empirical evidence in every decade since Chall's report (1967) in the USA and the work of Goswami and Bryant (1990) in the UK. The role of phonics and the balanced approach to reading are both deliberate choices underpinning the CAPS document. Much room is left, therefore, for further differentiation, conceptually and practically, between the role of phonics in an alphabetic writing system and how teachers actually handle phonics in the classroom.

3.4.2 Transcriptions: Style and quality

It was agreed that video footage would be transcribed as soon as was feasible. Transcription also enabled achieving important operational purposes. Anonymous and confidential data preservation satisfies basic procedural administrative requirements. Identifying, locating and sharing literacy event selections were made easy. To enable reliable, valid and objective research analysis, it was decided to structure the transcriptions as double-parallel (or tri-linear) text comprising verbatim transcription, and translation, and non-verbal information. In the first column, a verbatim record of the original utterances appeared in text with a clear indication in each instance of the speaker/"actor". The second column comprised a translation of the utterance if it had not been made in English. In the third column, non-verbal behaviour was recorded, including actions such as pointing to something (e.g., a word-card on the chalkboard), writing, changing location in the classroom, and salient facial expressions and postures. An exact second-by-second time-scale was avoided, although broad durations were indicated. Smaller details such as the duration of silences and waiting times were indicated nevertheless. Lines (i.e., rows overlaid across the three columns) were numbered to indicate each sentence spoken by a single speaker, or at most the whole utterance made.

[29] The authors are indebted to an external reviewer for providing some of the references, viewpoints and arguments relevant in this part up to before Section 3.4.2.

Joseph at the time provided further guidance in the form of those additional requirements and motivations reported below up to the end of the sub-section. Emphasis was placed on the fact that transcripts needed to integrate actions and gestures with verbal content or interaction. This had to reflect, further illuminate and/or be based on a teacher-intuition and CHAT rationale (Vygotsky, 1934), and was intended to address the critique against conversational and discourse analysts who have hitherto omitted the role of gestures and actions in studies of classroom interaction, and have assumed that learning is entirely achieved through (verbal) interaction. An exception is the analyst van Lier (1988).

Such an omission of actions has probably not been a casual oversight or an attempt to provide elegant transcripts to avoid the messiness entailed by including actions in verbal discourse. It is more probable that the impact of the long and domineering history of linguistics on the educational disciplines, with its decontextualised approach to language, and its marginalisation of other semiotic resources (gestures, intonation, gaze, etc.), in collusion with an existing tradition of language teaching that privileges the explicit public forms of language (grammar, full-blown sentences, etc.), has been responsible for overlooking the role of action among learners, and the "less-than-language" resources they utilise in knowledge construction. While linguistics (including sociolinguistics) has failed to include action, there have been other paradigms that have integrated language and action and argued against their separation (e.g., Vygotsky, 1934, 1987; Mead, 1934; Leontiev, 1972) and possibly the anthropologists Whorf (1956) and Sapir (1985). Using such a language-cognition-activity paradigm to underpin transcription work converges with the intuitions of good practising teachers as we witnessed also in some of our workshops. By "good" we here mean those teachers who are concerned with learning processes, observe individual learners to check if learning is occurring, and accept that there is always an asymmetry gap between teaching and learning, which consequently requires that a teacher must constantly observe –even while teaching – the learning process. A good teacher is not complacent that teaching automatically converts into learning. If transcripts are produced to uphold "Activity Theories" and teacher intuitions about learning processes, it is likely that such transcripts could be more effectively used as a resource in ethnographic interviews with teachers for research purposes, and equally for teacher-training purposes.

3.4.3 Method / approach

In order to relate the study's observation contents to the curriculum, which during the first year of the study had been converting from NCS to CAPS, the team was mindful of the need to consult regularly with DBE officials at provincial, district/circuit and school level in order to come to a good grasp of the curriculum changes that occurred and of the relevant contents in the eventual new CAPS documents.

It was also realised that the integrative approach to FP teaching implied that the existence of neat, well-demarcated "language lessons" may not be the rule and that, even where larger such identifiable units were the case, the literacy-event components (engagement with text) of interest to the study had to be sampled and analysed more deliberately, often as one- to four-minute clips or episodes.

The central strategy for all sub-teams first was to analyse all selections in accordance with the abovementioned three core dimensions, or consensus framework, after which additional layers of analysis (aspects of activity) could be added iteratively. This approach was pursued to ensure that analysis (and the broader study) remained well-grounded conceptually and was of sufficient depth to produce robust findings that could underpin thorough academic debate. It was, therefore, motivated essentially by the need to fill theory-practice gaps, and to keep our Limpopo and Gauteng partners together during data analysis. It meant, as further elaborated by Joseph, to counteract the critique by conventional large-scale researchers that research such as this overindulges in qualitative data and analysis on the basis of small

samples. Continuous benchmarking of the present study against a number of classic and more recent studies in South African classrooms (e.g., Hornberger and Chick (2001) on safe-talk; the work on I-R-F structures by Flanders (1962) and others; and Carol MacDonald's (1990, 2008a, 2008b) work, especially her findings from the Threshold project) further supports the point. In addition, the interpretation of secondary data on South African classrooms by using robust new frameworks remains a noble course and cause.

Finally, the present study focused more on accredited, research-based vantage points and less on policy-driven points of departure. In the process it made sure to include literacy teaching and learning activities across a spectrum of grades (1 to 3), language subjects (home- and first-additional) and locations (two widely different provinces in terms of urbanisation, socio-economic development, and language exposure and preferences). Video footage was further supplemented by information from interviews and discussions with education officials, including principals, heads of department and teachers at schools.

3.4.4 Equipment and producing and handling video footage

Although the initial intention was to explore obtaining and using video-analysis software to support the analysis of video footage, the study's scope was limited by the funding and human resources it had. However, high-quality video cameras (surround sound and high-definition images) and tripods were used. Existing equipment was supplemented by the purchase of an additional camera and tripod set enabling the consistent use of two camera vantage points and handling the extra bulk of work in Limpopo.

It was mentioned that studies such as this should consider optional ways of making available video footage without incurring the vast array of ethical limitations regarding anonymity and confidentiality, such as using the latest software to turn filmed footage into unrecognisable cartoon-like images. A suggestion at the time was that studies such as this should explore extending the value of discussions of preliminary findings through avenues such as focus-group sessions with teachers structured around audio-recordings and transcriptions to avoid breaching anonymity and confidentiality principles when working off video material.

3.4.5 Notes on the notion of learner regeneration

At the closing-out workshop after Year 1 towards the end of 2011, the representatives from a non-profit organisation, siyaJabula siyaKhula, were asked to make inputs on the conceptualisation of language teaching and learning in the classroom. This organisation has been active in the field of second-language (English) development in city and rural primary schools where African languages are the predominant community and initial school language(s). They were also at the time putting together a proposal for a language intervention with an evaluation component by the HSRC. A few indications from that presentation about the fundamental nature of learning in the classroom are summarised next in as far as they guided the team towards a better understanding of its own research tasks in relation to this study on language and literacy acquisition and development among young school learners.

- Teaching has to be understood as enabling learning, which happens inside the minds of learners.
- Researchers, and teachers, have to understand how learners add new (abstract) concepts to their existing knowledge and form (and revise) patterns between concepts within intricate mind networks.
- New concept acquisition should be appropriate in terms of learner readiness and processing skill (learning skills). The latter forms part of the meta-level facilitation by the teacher.
- Concept or knowledge growth comprises hierarchical, stepwise and cumulative progression against the context of all prior background and knowledge contents.
- Reinforcement of learning from multiple angles using multiple connections (links) produces the longest lasting results most quickly.

- The teacher should understand and be able to evaluate learner uptake, and pitch subsequent teaching accordingly.
- Learning increasingly becomes less natural (less automatic, as it were, reducing play and mimicking) and more structured or abstract, which requires benefiting from external guidance and pacing.
- A multilingual environment requires additional vigilance about (partly-)additional knowledge or concept worlds, which, if dealt with correctly, becomes a powerful resource.

3.4.6 Concluding notes on the development of the concept-based video-analysis approach

To reiterate, at the outset the study deliberately did not want to favour the use of any clear conceptual, theoretical or analytical paradigms or approaches for organising and analysing its data. Instead, the task was put to everyone attending the first working meeting, after some empirical observation data had become available, to present to the group his/her notions of what the video-stimuli seemed to reveal about literacy teaching and learning in the classroom. He/she also had to explain how the data, and any conceptual frameworks used, led to any conclusions that were reached. The working session was based on one of the observed Grade 3 English First Additional Language (EFAL) lessons.

A main purpose of that first working session, but even some of the subsequent ones, was to establish, explore and refine a working version of the conceptual basis, analysis approach and transcription requirements that could be retained during the final empirical phase. A self-imposed caveat at this stage was never to expect every possible good practice or component in every lesson. Any lesson constitutes only a snapshot of much wider work over the course of a week and longer, through different didactical activities, which on each day may be different deliberately. One should take care how one's own views about language education underpins what one wants and expects to see. What follows is an illustrative account of the type of observations made at the time and the discussion and realisations that consolidated into the analysis strategy eventually adopted for the study. Synthesising detailed findings and deriving implications are by no means the purpose now. Those follow in Chapter 5. The following elements are highlighted:

- Chanting in chorus (chorusing), often accompanied by movement and onomatopoeia, was noted immediately. A critical question concerned the interaction, or not, between an assumed cultural basis and cognitive and conceptual processing. This would impact on conclusions about the presence of common multi-sensory learning and proficiency achievement.
- With implications for cognitive reasoning and knowledge (conceptual) attainment, it was noted how intense oral engagement (oracy), which predominated, seemed quite unrelated to (English) literacy acquisition (and learning to write). The reason would lie in these actions having become ritualistic for both teachers and learners, not going beyond reliance on short-term memory processing. Such reading would merely comprise "imitating the act of reading" without real literacy value. Only requesting individual learners to read previously unseen passages would reveal proficiency levels. (It was acknowledged that other learning continues to take place, e.g., about team roles, moral contents, and converting print to oral language (basic reading / decoding).)
- Teacher-dependent interaction predominated, back-grounding learners' learning needs.
- In addition, such teacher-led activity comprised a highly patterned and routinised "didactic" approach. Possible explanations for this, that had to be verified all along, could be teachers' demotivation in the absence of support, frequent curriculum change, and coping by remaining within their comfort zones.
- Actual time on task (English learning) was very limited, and with it opportunity to learn and challenging them enough cognitively every day.
- No consistent learner confirmation (of correct answers, achieved learning) took place, with implications for how interaction was managed in classrooms and learners' actual concept / knowledge attainment.

- The goal of the lesson was not articulated clearly and remained obscure. Meta-statements strengthen (as their absence erodes) learners' sense of their role in the anticipated lesson interaction. The same applies to the factual information they would be expected to look for, as well as any reasoning they may need to apply in the venture on the basis of opinions or evaluations they may need to form.
- At the micro-level of lesson/subject (and pedagocial) content, a few observations were made about likely rubrics that deserved scrutiny across lesson observations with further teachers. Examples included teachers': reformulation of the initial question put to their learners and the basis for that; semantic mapping to nouns, verbs, parts of speech, morphemes, etc.; good linkage between vocabulary, reading text and context; and the approach to gaining new vocabulary (explicit or not; based on discovery from reading or an up-front selection strategy, for instance, i.e., seeing the wood for the trees, etc.). Possible quantifiable indicators and coding that were identified could include:
  - Waiting time (frequency and duration)
  - Ratio of individual, group, chorused and other responses
  - Evaluative confirmations (e.g, "good"), ignoring learner responses (incorrect ones in particular), and the number of completed and incomplete I-R-F loops
  - How often pictures are linked to the text read by learners / teachers
  - What learners do with their hands.
- The team agreed to try and observe at least one "good" class to serve as some form of control.
- The team's ideal "method-discourse" with regard to the improvement of teacher proficiency was also raised. Should/did the present study, covertly or overtly, pursue either of or both a revolutionary or an evolutionary approach to improving classroom teaching? Put differently, should it dramatically replace what is wrong, or gradually improve existing routines?

In relation to the final point above, Joseph at the time summarised the relevant background to and outcomes from the team's discussions as is briefly related next. A revolutionary approach starts with an "ideal of education" informed usually by theory and/or policy, develops criteria to observe classroom events, applies these criteria to classroom data, and evaluates educational activity, including teacher performance in terms of these criteria. It is top-down in approach. Teachers are expected to change their teaching behaviour to align it with educational ideals.

An evolutionary approach is based on the asynchrony between teaching and learning, and argues that education is largely embedded in the "invisible curriculum" (hidden curriculum) as defined by Barnes (1969, 1976). Research makes this invisible curriculum visible. An evaluation of this invisible curriculum reveals instances of good learning and bad learning, good teaching and bad teaching. Policies and theoretical paradigms do not have a deterministic impact on actual teaching and learning processes, nor can educational activities be dismissed as a failure. A researcher equipped with an evolutionary approach attempts to rescue instances of good teaching and good learning from the invisible curriculum of classroom talk, partly because no theory can tell us fully how to evaluate educational practices, but need to themselves be informed by critical analyses of practices, but also partly because teachers need to be trained through their own good practices to feel empowered as teachers. These practices, as already pointed out by classroom researchers (Barnes, 1969, 1976; Allwright, 1984, 1988, 1993), are usually not available to teachers. A critical identification of "less-effective" and "more-effective" teaching strategies in terms of good learning (even from a single classroom) helps to preserve the rich and under-researched experiences of teaching and learning, and protect teachers from the alienating effects of theory and policy, however well-intentioned.

While some of us may favour an evolutionary approach to classroom data, the question of its relationship (or lack of it) with a revolutionary approach remains unanswered. Could an evolutionary approach succeed through inductive reasoning from the data, thus excluding the need for external theory? Or should an external theory provide criteria to identify different kinds of teaching and learning in the data, but refrain from evaluation, leaving evaluation open to teacher interpretation?

Chapter Four – Methodology / Design

An explanation appears in Chapter 2 of why and how the present research consortium got together. It is accompanied by a description of the research problem. This then culminated in the subsequent formulation of the rationale behind the study, as well as the research aims, objectives and questions that drove the study. In Chapter 3, the conceptual and theoretical underpinnings of the study have been presented in two ways. Sections 3.1 and 3.2 mainly comprise the contents of the study's literature review. Section 3.3 reflects the decisions about the analysis framework selected for the study. The activities and dynamics reflected in these three sections were interwoven to such an extent that their reporting has been kept together in Chapter 3. Without repeating any of these conceptual arguments and contents, Chapter 4 is now devoted to a description of the operational aspects of the study. The sections that follow, therefore, cover the research team, participants (sample), instruments and procedures applicable to the study.

4.1 The research consortium

Two main drivers structured the team composition. The first relates to the proficiency and technical capacity for undertaking the study towards producing the anticipated knowledge and research-based solutions. This determined the composition of the team in relation to the expert members in the various roles of principal investigator, co-investigators, main partners, other collaborators, and, to some extent, post-graduate students. The second driver relates to the capacity-development component of the study. This determined the involvement of the various post-graduate students, especially from the vantage point of being exposed to and learning about research, but also contributing knowledge.

The NRF, as funding agency, by specifying elements of the composition of the teams of consortium studies such as this, as well as how the funding should be disbursed, to a large extent determined both components mentioned in the previous paragraph. In relation to research capacity, a consortium model across three institutions was required. This had as purpose multidisciplinary gains through expanded collaboration across organisations. Without reserve the present research team confirms that this objective has been achieved. In relation to capacity development, one of the two participating academic institutions had to be from a rural province, having been disadvantaged formerly. This would also then apply to the student bursary holders. These characteristics are therefore reflected in the composition of the team described below.

Initial consultations, mainly in the first year, from time to time comprised seminars or think-tanks to which open invitations were extended. This was pursued deliberately in order to generate as many ideas as possible before focusing the study again. A number of people in this way attended only one or at most two occasions. However, the summary below comprises only the names of those who have become associated more regularly and for longer periods, especially into the second year, with the project and who produced inputs and made contributions on an ongoing basis. This also applied to student participation. Some of the initial sessions were open to many more students, but only the names of those who formally or as official bursary holders became connected to the study are elaborated on below. Students' study topics or contributions to the analyses are not reflected below. These are either integrated into the reporting of research findings in Chapter 5, or in Annexure 1, where information is summarised on students' bursary-funded post-graduate work. Only a very brief summary of students' study levels and university affiliations are concentrated on below (in Section 4.1.2).

4.1.1 Senior investigators, partners and collaborators

The institutional parties which formed the consortium throughout comprised the HSRC as the leading partner, with the Universities of Limpopo (UL) and Pretoria (UP) as the other two members. Those individual team members named as such below were involved in the study on a regular or ongoing basis. The consortium operated with an internal steering committee. It comprised two representatives from each of the three institutions throughout. In addition to the principal investigator and two co-investigators (see below) the other three members were Dr Michael Joseph (UL), Dr Michel Lafon (UP, CentRePoL) and Ms Shawn Rogers (HSRC).

Principal Investigator

Dr CH (Cas) Prinsloo served as principal investigator for the duration of the project. His role was to set up the consortium and convene the proposal-production process. Once the grant had been awarded, he led the consortium. He was responsible for all project management, administration, finances, reporting and the academic leadership of the study. Institutional capacity came from the Education and Skills Development (ESD) Research Programme within the HSRC.

Co-Investigators

Prof Esther Ramani led the Limpopo group, to which students from the University of Limpopo were also attached. She was responsible for coordinating all the data-collection activities and analysis contributions of the Limpopo sub-team, including recruiting and supervising the bursary-holding and a few additional students. She was affiliated to the School of Languages and Communication Studies and also responsible for and teaching within the BA CEMS course (Contemporary English and Multilingual Studies), up to the beginning of 2013 (Year 3), when she moved to Rhodes University from where she continued her obligations to the study and its students during its final year.

Prof Vic Webb led the Gauteng group, to which a student from the University of Pretoria was also attached. He served as the Director of the Centre for Research on the Politics of Language (CentRePoL), besides being affiliated to the Faculty of Humanities (Linguistics Department). He was assisted in the operational side of activities by Dr Michel Lafon. Prof Webb's interest and proficiency focused on: the disempowering and marginalising effects of poor management of language policy decisions, construction and development; the implementation of language planning in a school context; and the effect on individuals and communities (especially of the hegemony of English).

Partners

Dr Michel Lafon was seconded to CentRePoL from the French Institute of South Africa (IFAS), and the National Centre for Scientific Research (CNRS), for the first two years of the study and parts of the final year. He served as convenor of the empirical data-collection arrangements and contact with schools in Gauteng, besides being part of the steering committee.

Prof Michael Joseph, initially affiliated to South Africa Netherlands Research Programme on Alternatives in Development (SANPAD), but later also research fellow at the School of Languages and Communication Studies at UL, and eventually, for the third year of the study (2013), with the University of Rhodes, served as convenor of many of the activities of the Limpopo group, including student supervision, empirical work and data analysis. In addition, he was part of the steering committee.

Shawn Rogers, representing HSRC on the steering committee, served as part of the Gauteng and HSRC team, and was involved in data collection, video-footage transcriptions, data analysis, report writing and many overall administration- and management-support tasks.

Collaborators

Prof Elizabeth (Lilli) Pretorius, from the Department of Linguistics and Modern Languages at the University of South Africa, collaborated regularly in working sessions and related tasks having to do with the analysis of video footage of lesson observations and the subsequent critical reading of research writing.

Prof Rinelle Evans, from the Department of Humanities Education at the University of Pretoria, contributed much to the conceptual grounding, initial setting up of empirical work and access to academic literature and conversations during the first 18 months of the study on the basis of her expertise and international collaboration in relation to classrooms characterised by complex language encounters. A key thrust in Prof Evans's work is to find ways in which language development and learning can be enhanced by the linguistic and cultural diversity brought into the interaction by both teachers and learners, especially through their mother-tongue proficiencies.

Ms Pat Murray and Mr Andrew Murray, Directors at the non-profit organisation siyaJabula siyaKhula, participated in many of the conceptualisation and working sessions aimed at setting up and refining the study and undertaking its data analysis.

4.1.2 Research capacity development – post-graduate students[30]

Four students were formally linked to the study from the outset (March 2011) through the online system of the NRF following the necessary confirmations of their registration by the relevant universities. The first three listed below studied at the University of Limpopo and the fourth one at the University of Pretoria. After that, various combinations of ongoing and new bursary students prevailed. Their number was strengthened at times by students from the University of Limpopo who were not official NRF bursary recipients.

Puleng Mathekga started her junior degree (BA CEMS) in January 2009 and completed it in December 2011. She received an NRF bursary during her final year and did a research assignment in a Limpopo school on whether the school followed either a reading readiness or emergent-literacy language-development paradigm.

Tseke Mphahlele started his Honours degree in Applied Language and Multilingual Studies in February 2011 and completed it in March 2012 with NRF bursary support over the two years. He focused on models of bi-literacy development as part of a theoretical investigation.

Abram Mashatole started his Master's degree in Translation Studies and Linguistics in February 2010 and received bursary support from the NRF during 2011 to 2013, when he worked on his Master's degree research report, which he completed in June 2013. He theorised conceptualisations of literacy development by studying classroom practice, in particular by exploring teachers' theory revision. Other foci were the relationship between literacy events and literacy acquisition in early childhood development, and

[30] In this section, general information is provided on the study topics that students have been addressing in their dissertations, theses or relevant coursework. In Annexure 1 findings of particular relevance to the topic of the present study are summarised without further mention of details from dissertations and theses otherwise available. Specific student contributions to analysis using the data collected for the present study are incorporated in Sections 5.1 to 5.3.

developing an ethnographic perspective on the relationship between contextual conditions and practices in literacy learning.

Loretta Somo completed her Master's study and dissertation in December 2011 at the University of Pretoria, having started in January 2009, and having received NRF student support for her final year. She did a comparison of the English language proficiency of Grade 4 learners, who spoke an African language at home, across their English and Social Sciences school subjects. Having moved to Ethiopia then, it was not possible to support her intended follow-up doctoral work by means of an NRF student-support grant.

Shawn Rogers's D Phil research proposal was accepted in 2013 by the University of the Witwatersrand as an outcome of being granted NRF bursary support since July 2012 (ongoing into 2015). She completed her instrument development and data collection in 2014. Data capturing and analysis and thesis writing continue. Her study focuses on the link between multilingualism and cognitive development. More specifically, her study is on language acquisition, in particular the interaction between first- and second-additional language as forms of mono-, bi- or multilingualism and their effect on levels of language proficiency, hemispheric (left, right, lateralised) and cognitive processing, and problem solving.

Mafeye Morapedi engaged in the empirical part of his work on language policy development at a Limpopo school towards his BA Honours dissertation in Applied Language and Multilingual Studies. He studied from 2011 to 2012, but received NRF bursary support only during 2012. The study on learning materials in a Limpopo township school focused on teachers' and learners' use of textbooks within broader themes such as the development and implementation of multilingual education, change in people's perceptions and retrieval of the prestige / status of learning.

Mapelo Tlowane's Master's dissertation at the University of Limpopo, where she was also a staff member, which did not allow her to receive bursary support, was about the implications of private speech for FP literacy development among Sepedi children. She studied from 2011 to 2013 and contributed to the project through the various joint working meetings.

France Mokolo undertook a Master's degree, receiving two years of NRF bursary support (2013-2104), in Translation Studies and Linguistics at the University of Limpopo. He registered during 2012 and completed his study in 2014. His focus was "translanguaging" in Sepedi home-language and English first-additional language lessons in a Limpopo school.

Ms Sibongile Bopape registered during 2012 and received an NRF grant from 2012 to 2013 for her Master's study in English. She focused on the "triadic" dialogue evident in the I-R-F structure in different classroom settings in a Limpopo township school. (The study is still being completed owing to the influence of special family circumstances).

Matselane Maja served as project administrator for the duration of the study. She took care of the arrangements and records related to project activities, meetings, working sessions, data-collection visits, equipment, other travel, financial documentation, contracts and other relevant components.

At the very early stages of the study, a second post-graduate (doctoral) research trainee, Ms Gamong Mokgatle, was involved in some activities. Dr N Phatudi (UP) helped to improve the definition and identification of mother-tongue teaching, and information on elevating the usage status of African languages in school.

4.2 Sample: respondents and participants

Research information and data were collected from various categories of "respondents" or participants. This was aligned not only with the objectives of the study, but also its multidisciplinary and multi-institutional[31] nature. A single interview or two were held with a senior curriculum manager at each of the provincial offices of Gauteng and Limpopo, where the study took place. This was to ensure that the study remained within and was informed appropriately about the language and curriculum policy context set by the DBE. For Gauteng, an interview was sought and obtained with the official heading the GPLS/GPLMS to appraise ourselves of the aims and social circumstances surrounding the programme, and to ensure that our research would not interfere with the Department's new endeavour. The provincial staff consulted about the overarching curriculum background and permission to access schools were Ms Dederen and Prof Ralenala in Limpopo and Ms Buntting in Gauteng.

At school level, semi-structured discussions were held with school principals, five in total, or any substitute we got referred to, such as deputy-principals or HoDs. This served to contextualise the policy, language, teaching capacity and community background within which the observed lessons were located. A partly similar purpose was served by interviews with the 12 school teachers whose lessons were observed. The latter also comprised structured components to document teaching load, conditions and requirements, as well as debriefing interviews during which assumedly observed dynamics were verified with teachers. In Limpopo, one of the interviews was conducted with a small focus group of teachers.

Sampling was purposive to the extent that only schools were included where learners had to switch at some stage, generally after Grade 3, to a language of instruction different from their home languages. However, sampling was also convenient and based on snowballing or referral, to capitalise on locations where access could be secured. A deliberate effort was nevertheless made in the process to ensure that sites and observations would differ across key characteristics to avoid observation bias. As a result, lessons in EFAL, Sepedi and isiZulu (first or home languages) were observed across Grades 1 to 3. Schools were either from township areas in the large cities of Pretoria and Johannesburg, or from village areas around Polokwane and the University of Limpopo. Schools were selected when their conditions of socio-economic status, deprivation and disadvantage were more taxing that the norm. As a matter of fact, unbeknown to us, the Gauteng schools had all been included within the GPLS[32], which serves to show that they were considered below average. This was done to ensure that solutions were sought that would be relevant to the many learners and teachers experiencing severe challenges without access to the contingent resources that would help address them.

Information gained from the foregoing sources served as backdrop for the selection and study of the classes and teachers for whom lessons had to be observed. Observation included mainly literacy teaching and learning behaviour during lesson time, but also unstructured (that is, non-systematic) observation of the availability and use of written learning materials and selected analysis pertaining to some written learner work. An overview is provided next of the numbers and relevant characteristics of the lessons observed. This is done without compromising the identity of schools, teachers or learners. For that reason, no names are provided, although the contributions of everyone are acknowledged and highly valued.

[31] Section 4.2 is used for providing general methodological information applying across the board, while additional specific information reflecting provincial variation is provided in Sections 5.1 and 5.2.
[32] At the time only a literacy strategy; later expanded to include Numeracy/Mathematics.

For the Limpopo sub-study, the Limpopo sub-team[33] visited one school[34] during February and March 2013. Seven regular teaching sessions were observed at this school on 5 and 6 February 2013. Six additional lessons were observed on 4 and 5 March 2013 during which two research-team members conducted "intervention teaching" (see Sections 4.4 and 5.1 for more information about this). A more detailed overview of these lesson observations in Limpopo and the five lesson observations at three schools in Gauteng, respectively, is provided in Sections 5.1 and 5.2. In Limpopo, three teachers and two researchers conducted lessons with three different classes. In Gauteng, five different teachers conducted lessons with five different classes from three schools. The first school visit, with two observations, took place on 14 November 2011. The second visit with one observation occurred on 23 April 2012. The final school got visited on 6 and 24 August 2012 for two different lesson observations.

4.3 Data-collection instruments

The data were collected by using semi-structured interview schedules for the initial interviews with provincial officials, school principals and teachers, including the one teacher focus-group interview. These initial interviews mainly documented demographic and other contextual characteristics pertaining to school and classroom conditions. Structured questionnaires (interview schedules), administered orally by those team researchers that were involved in classroom observation, were used to collect the data on language policy implementation and the themes that the team was interested in once video materials had been viewed and preliminary analysis of the footage had been achieved. This visit coincided in most cases with the debriefing and feedback discussions arranged with all participating teachers. In relation to language policy implementation, the study was interested to know more about: school's linguistic landscape; the treatment of language in classroom contexts, e.g., code-switching; the sociolinguistics of language behaviour; the use of a standard language variety vis-à-vis urban or regional varieties; and language attitudes.

Video recordings were made from two vantage points. One was a tripod-mounted camera that most often faced the class from one of the front corners, often on the teacher's desk. It could pan well across all the learners, but sometimes had a limited view of teacher activity on the chalkboard. The other was a roaming hand-held camera, which could record all activity on the chalkboard, and had the added advantage of zooming in on selected learner work, besides panning over the whole classroom. Its disadvantage was greater instability of image at times. Completed verbatim transcriptions were made of the five Gauteng observations during the early phases of the study while the analysis approach and identification of literacy events were still ongoing, and, in fact, to assist the team in deciding how that should be approached. Segments were preselected from the subsequent digital recordings for transcription and further analysis of those pieces that had specific literacy interest to the study. All content spoken in African languages were translated into English at this stage too, while non-verbal behaviours were also annotated in parallel. The various team members also compiled any field notes that helped to jog their memory on later viewing and interpretation of the transcriptions.

Some samples of learner workbooks, textbooks and teachers' lesson plans, albeit not as the result of a systematic approach, were collected to assist with keeping the alignment with official curriculum content and to illustrate specific issues that were observed during recorded lessons.

[33] Abram Mashatole, Moses Morapedi, Sibongile Bopape, France Mokolo, Proff Esther Ramani and Michael Joseph.
[34] A second school was involved initially, but informed consent procedures could not be aligned in time for data collection to be dealt with in an acceptable ethical manner.

4.4 Procedures

As explained in Chapter 2, the study was divided into two distinct phases. The first entailed a period of clarification of approach and conceptual frameworks, aided by preliminary data collection aimed at refining how transcriptions should be made and analysis had to be approached conceptually. The second, once sufficient consensus and clarity had been found, entailed further data collection and analysis.

The internal steering committee of six members met regularly, on more or less a quarterly basis, to manage the project, plan next activities and review progress. Besides these face-to-face meetings, at some of which some of the bursary students were also present, a continuous flow of e-mail conversations were kept going between the executive team members (principal investigator and two co-investigators), and often the whole steering committee. These were sometimes extended to the whole team of partners and collaborators in order to synchronise data-collection and data-analysis tasks. The relevant working sessions were open to broader participation by academics, post-graduate students and other stakeholders. The planned themes for the six semesterly seminars were largely adhered to and entailed:

- Sharing and refining project ideas, approaches and conceptual frameworks at a launching event
- Reporting on first-year progress; sharing preliminary conceptual and empirical contributions
- Reporting on pilot work; discussing theoretical and conceptual frameworks; reaching working definitions
- Discussing the report outline; conceptualising final empirical work
- Reporting on progress with final in-depth studies
- Having a close-out meeting; planning final report-writing and dissemination.

Besides reducing the empirical school coverage possible under the originally proposed scope and budget for the study, which became necessary as the grant awarded was only about a third of the requested budget, two other deviations were: to have the study culminate in this final research report, and not a co-edited book publication; and working less as five modular projects, but rather as a single study. The initially designated module convenors (co-investigators or collaborators) across consortium institutions nevertheless remained custodians, as it were, of the thematic contents allocated to each. This went a long way to maintain optimal multidisciplinary and inter-institutional collaboration in the study as a whole, as everyone had sufficient opportunity to engage with everyone else, even outside someone's primary interest or expertise, also as and because all data were shared.

Two key initial thrusts, up to approximately 15 months into the study, was reaching consensus on defining and identifying the unit of analysis of the study, that is, the so-called literacy event/s, and reaching sufficient consensus on the conceptual framework within which analyses would have to take place. The latter specifically centred on agreement on the three-part analytical framework eventually adopted for the study, as already discussed. The three pillars comprised the level of cognitive challenge that learners were exposed to during teaching, interaction management during lessons according to the I-R-F structure (initiation, response, feedback), and the real concept attainment that learners succeeded in.

Data collection comprised semi-structured and structured interviews, and classroom observation as documented by producing video footage and the subsequent transcriptions. The latter included not only verbatim recording of all utterances made during the selected English, isiZulu and Sepedi lessons, or portions thereof, but also the relevant translation into English, as well as the accompanying record of non-verbal behaviour. Translations were contracted out to two experts from the University of Pretoria; one a Sepedi and the other an isiZulu lecturer. Both also had the relevant language as their mother tongue and spoke it as their home language. Part of the assignment of these translators was to identify for the research team, especially those not proficient in the two African languages, any idiosyncratic or otherwise non-

standard variety usage of the languages. It can be noted that one co-investigator, Prof Webb, is partially proficient in oral isiZulu, while the other one, Prof Ramani, similarly in Sepedi. One of the partners, Dr Lafon, underwent and completed the university examinations for a formal isiZulu major's course while working on the study. Most of the post-graduate students and bursary holders were proficient in Sepedi and a few other African languages.

Before and after undertaking classroom observation and making the digital video recordings, team members responsible for data collection obtained any illustrative material of importance to the literacy components of the observed lessons. These mainly included copies of some lesson plans and examples of written learner work.

In preparation for data analysis, each sub-team responsible for conducting the relevant observation and producing the transcriptions also identified and selected the literacy-event snippets that had to be analysed in more detail. The video footage and relevant transcriptions were then shared with the whole team. Flexibility and variety were retained deliberately as analysis approach throughout to allow the generation of multiple perspectives (of theory and interpretation). However, team members first had to ensure that they applied the triple-component analytical framework before offering further insights. The approach to analysis mainly comprised thematic content analysis of the visual (video footage) and textual (transcriptions and related learner work and teacher lesson plans) stimulus materials in accordance with the pre-developed conceptual framework. The data was mainly qualitative in nature and dealt with using qualitative analysis procedures within a broader qualitative analysis approach. However, there were a few instances where coding and scoring of quantifiable occurrences were undertaken. Analyses were cumulatively expanded and presented at the working meetings. A selection of contents from these presentations and some additional work by the respective sub-teams and sub-group members are reflected in the reporting of findings in Chapter 5.

In summary, choosing to work through multiple communication platforms (executive committee, steering committee, working meetings and ongoing direct conversations, by e-mail mostly), as reported above, enabled the study to generate and refine project ideas, steer and monitor progress, engage in data collection and analysis, and undertake final reporting as intended. At a more detailed level, sufficient agreement was reached and delivery achieved in relation to: precise formulations of the research problem; sound underlying theoretical and conceptual frameworks; essential design and methodology features; appropriate samples; workable data-collection procedures; valuable student allocation; analysis techniques; critical analysis; and recording the findings. More precisely, the members of the research team learnt how to define and use the classroom "literacy event/s" as a unifying reality. This was achieved by adopting a triangulation strategy that initially allowed large diversion in terms of methods and conceptual frameworks. Through interaction and iterative activities coherence and consensus were pursued and increasingly achieved. Piloting work cast light on how well the various selected conceptual frameworks served to underpin classroom reality and provided a platform for theory development during the first half of the project. The notion of "literacy event" was refined all along and the emerging consensus on conceptual and theoretical positions and foci increasingly underpinned subsequent study components and provided rigour to its empirical work. To share the literature known to each expert also proved to be invaluable for the project. Salient notions taken heed of and incorporated into empirical work and data analysis in this way included: literacy and innovative teaching; social developmental and neuro-cognitive processing and language acquisition; classroom assessment and feedback (or "assessment for learning"); multiple combinations of languages and language varieties; multilingual teaching and learning in classrooms characterised by complex language encounters; and the (dis)empowering effects of aspects of the implementation of language-in-education policy with specific reference to language planning theory.

4.5 Ethical clearance, procedures and conduct

All research projects at the HSRC have to serve before its Research Ethics Committee (REC) for ethics clearance. That implies that before any study commences, and especially before participants are involved in data collection, the protocol, research instruments, information sheets and consent forms for participants are submitted to the REC for scrutiny. Clearance was obtained for this study through a phased approach. This means that the methodology and design of the study was submitted to and cleared by the REC early in 2011. Then, before data collection started in Gauteng in November 2011, the data-collection instruments and procedures were submitted and given clearance. Because an additional teacher questionnaire had to be administered as part of the remaining data collection during April and August 2012 in Gauteng, and during February and March 2013 in Limpopo, along with slightly adjusted classroom observation procedures that accommodated intervention teaching by research team members in some Limpopo schools, these additions and changes got submitted and cleared at the respective points as well.

The universities of Pretoria, Limpopo and the Witwatersrand processed any additional requirements which they set for their post-graduate students, and staff, for that matter, in relation to ethics clearance.

It is a matter of routine conduct for research projects to respect participants during all interaction with them, to weigh and make known any risks and benefits that may be involved, and to deal with their anonymity and confidentiality appropriately to ensure that respondents are not exploited, harmed or misled, know that they are participating in research, and understand what their involvement will entail. The prescribed formal procedures were followed in providing them with a research information sheet, and, on the basis of that, obtaining their informed consent, without coercion, to participate in this study.

In the process the project dealt with two specific additional issues. The first was obtaining parents' or legal guardians' consent in advance for involving minors in the research, by first giving the adults explicit information about the intended study, and once agreed to, to also obtain their children's independent assent for their (the children's) own participation. The second matter was obtaining specific permission from teachers (and schools) to make video, photo or audio digital recordings of their lesson delivery. Teachers were therefore required to give informed permission on the basis of exact details pertaining to how such recordings were going to be done, handled, kept and used in research or any other wider dissemination.

To facilitate the latter process at schools, a video protocol was prepared and made available to schools during May 2011. It was done in the form of a memorandum of understanding with schools, and distributed on the official project letterhead with the appropriate team contact details. This memorandum also regulated aspects associated with the wider notion of research in classrooms. Distribution only followed on the basis of personal contact with principals and the development of an open relationship of collaboration with school principals, and through them also their governing bodies and the selected teachers. It was reiterated that schools were under no obligation to allow making the video footage of lesson delivery. The necessary assurances (copies of letters) were also provided about permission for the study by the offices of the Department of (Basic) Education in Gauteng and Limpopo, and staying within their requirements, in addition to ethics clearance by the HSRC's REC. The latter included obtaining teacher and parental consent for the recordings. School governing bodies were specifically informed about the occurrence of lesson observations during school hours, with an undertaking not to disturb regular progress of the class. Guarantees of anonymity of schools, teachers and learners during reporting were also provided, for example by using pseudonyms or coded identities. Teachers were informed that they could withdraw their permission during or after making the recordings. Provision was also made for feedback to

teachers to verify preliminary findings about their lessons, and to gain further contextualisation of the observed lessons. At this point, selections of footage or analysis, if required, could be removed on the request of teachers. Furthermore, provision was made for noting (acknowledging) teachers' points of view should they differ from those of the researchers. Teachers were given the assurance that recorded footage would not be shown, analysed or used outside the research team members' direct involvement in the study, for example, at conferences, without specific further authorisation by the teacher. Teachers were informed that they could request their faces to be hidden. Specific assurances were given as to not handing over footage to officials of the Department of Basic Education (nationally or provincially), besides keeping the footage safe and secure.

In accordance with a prior undertaking, teachers were provided with a copy of the recording of their own lesson for use at their own discretion, for example for professional development purposes. This occurred around August 2013. Further distribution to the school or governing body was made subject to teachers' permission and the prevailing informed consent agreements. No research team members ever exercised this option. On receiving their video footage on DVDROM disk, teachers acknowledged receipt in writing, accepted that the contents were intended for their private use, or, with their permission, for teacher development within their own school community, and agreed to abide by the ethics requirements of the HSRC as per the informed consent procedures governing these research activities. It was specifically arranged, in conclusion, that permission for using the recording outside these boundaries, in particular for further research purposes, including any publications, had to be requested in advance from the HSRC's Research Ethics Committee through the principal investigator. The teachers were alerted to the fact that not doing so may open them up to legal consequences.

Chapter Five – Report on findings

A number of parallel dimensions are being accounted for during reporting of the study's findings in this chapter. These include, or integrate, the outcomes of discussions on the paradigm/s and conceptual framework/s underpinning the work, covering the data from the empirical class observations, and identifying common issues for inclusion in Chapter 7.

In this chapter, the first of two main structural mechanisms for ordering discussion of the analysis and presentation of the findings is covering the two sets of provincial sites separately. Sections 5.1 and 5.2 respectively cover the Limpopo and Gauteng legs of the study. Integration of the findings is pursued by making a few very selected comments at the end of this chapter on matters not covered sufficiently elsewhere, but mainly as part of Chapter 6. The split by province was considered necessary for methodological, contextual and practical reasons. In relation to methodology, only the Limpopo leg involved the unique feature of intervention lessons by researchers. This provisional separation also gave the sub-teams coordinated by the two co-investigators and principal investigator the space to apply their preferred conceptual and paradigmatic approaches unhindered for a while before tackling the task of integrating findings across sites. It was hoped that strong conceptual anchoring of the relevant analyses would be ensured in this way before entering into debate with possible other perspectives and interpretations. In terms of context, participation by city or township schools from urban areas was the focus in Gauteng. In Limpopo, the character of participating schools was more rural. Regarding practical conditions, day-to-day operations and the need for regular interaction between team members required phase-to-phase proximity and convenient and affordable mobility. Because teams included post-graduate students, meeting such requirements made data collection, processing and analysing much easier.

The second organising principle underlying this chapter was to base all classroom analysis on the full team's jointly-developed three-part analytical structure. This is presented in Section 3.3. It covers the interactions, conceptual gains and cognitive challenges inherent to all the observed lessons. The three-part model is followed flexibly with as much and as early integration as possible to avoid empty repetition and to facilitate interpretations that would reflect the unique dynamics of each site/observation.

Readers are reminded of the fact that much more video footage was produced and transcribed than could be, or was, analysed. The main reason for this is conceptual, in that snippets were selected to reflect what the team considered as "literacy events", where teachers and learners engaged in depth with written text. The other reason is pragmatic, and very much secondary. The scope of the funding and study only allowed limited analyses.

Student contributions are not as a rule reported separately in this chapter, unless very specific inputs or additional analysis of video footage and transcriptions are acknowledged as such. The work reflected in their research reports, dissertations or theses, as already covered in Section 4.2 and Annexure 1, is also not again referred to. Otherwise, student inputs form part of the reporting below, also being the result of joint participation at the various working sessions. Students were requested before a number of the specific working sessions to compile and present brief inputs, not only on their post-graduate work, but also specifically on the project data. In a few cases, these deliberately overlapped. The project also encouraged involvement beyond the direct project bursary holders. At Limpopo University, for instance, some students with independent bursaries of their own also had capacity to work on the study. In one of the earlier working sessions, each student had to reflect briefly in relation to their own studies on: what he/she saw as the main problem to be addressed; why it was important to solve that problem; what he/she formulated as the main research questions and any other related key objectives of the study; how he/she would go about

collecting data and finding answers to these questions (sample, instruments, procedures, analysis techniques), including any likely implications of the study; and main findings (for completed or partially completed work). They benefited from the study partners' comments on their inputs.

5.1 The Limpopo-component of the study

Reporting in this section is focused as far as possible on the unique design features and data collected in Limpopo by the relevant co-investigator, senior partner/s and post-graduate students located there. The first sub-section (5.1.1) is devoted to an overview of the methodological components unique to the Limpopo data, while the subsequent sub-sections comprise the reporting of the findings.

5.1.1 Methodological features

Research design in the Limpopo strand of the project

In the Limpopo strand of the project, an important decision was taken not only to observe, record, analyse and interpret the regular lessons taught by the teachers in FP lessons but to plan some intervention lessons to be taught by university academics and research scholars on the project. The reasoning behind this move is captured well by a postgraduate scholar in our research team, Mashatole (2014, p. 25). He writes: "In South Africa, the wealth of studies into classroom practices and the schooling condition has unequivocally shown that school education is in crisis. As a result, the assumptions underlying the need for intervention lessons is that current teaching practices have been over-researched, and that continued research into over-researched areas may not yield new insights. One may go so far as to say that it is unethical to publish findings that only duplicate what is already known: namely that teacher talk dominates in most South African classrooms, that there is a predominance of rote learning and that learners are mostly engaged in lower-order thinking. To avoid the proliferation of such studies, there is a need to experiment with possible models of change, and to research changed practices that might hold more promise for addressing the country's education crisis."

Mashatole's thinking is based on an important distinction he identifies in the literature between "teacher training" and "teacher development". While teacher training is often top-down, theory-laden and oriented towards the certification of teachers, teacher development is focused on an ongoing process of self-reflection, which is enhanced by encounters with practices different from one's own. The intervention lessons taught by university academics were therefore meant to provide such encounters.

The following sub-sections describe in detail the research design, site and subjects of the research, the data collection procedures and the analytical frameworks used to make sense of the data.

The Limpopo study used a qualitative case-study approach as it enabled researchers to gain an understanding of classroom events as they occur in real time. It also enabled teachers to articulate their views and reflect on their complex classroom experiences, and their beliefs about how literacy is best learned. In addition, the researchers were able to track and monitor changes in attitudes, views of teachers and their general receptivity to innovation in literacy classrooms over extended interviews.

Research site

Various sampling strategies were utilised to select schools to be part of this study. Students at UL were recruited to undertake a survey to locate innovative public schools around Limpopo. A list was generated, from which schools in Mankweng, a township accessible to the university, were shortlisted.

The shortlisted schools were approached and narrowed down to two schools, on the basis of the school's willingness to participate in the research. However, eventually only one school remained in the sample as it was the only one that met the stringent ethical obligations of the study. The reason the other school was dropped from the data sample was because parental consent forms were not returned in time or were returned unsigned rendering the data recorded from such lessons unusable for research. This meant that the only usable data for the study were from the school were the maximum number of parental consents was obtained, and the learners without signed consent forms could easily be placed in other classrooms of the same grade for the duration of a lesson observation.

The school is located in Mankweng township, a rural area about 30 km from Polokwane (capital city of the Limpopo Province) on the Tzaneen road. The population of the area is 99% African, with 94% Sepedi speakers (STATSSA/Census 2011). The population is therefore predominantly Sepedi-speaking, with the exception of Xitsonga and Venda language speakers who have settled in the area either for educational and/or employment opportunities. Mankweng is a very dynamic township in the sense that it has grown and continues to grow economically and in terms of infrastructure. Though it is largely a township, it is surrounded by sprawling rural communities such as Makanye, Mamabolo, Mamotintane and others. Mankweng houses a regional hospital, a university, a public library, a sports complex and a children's park.

The school is considered as Quintile 3, which means that the school serves some of the most impoverished geographical communities in the country, and is therefore a "no-fee" paying school. The school also runs a feeding scheme funded by the Departments of Basic Education and Social Development. The school, being located in Mankweng, competes with two additional primary schools which are within walking distance of each other.

Though the school and community are predominantly Sepedi-speaking, the teachers noted that due to the increasing complexity of the Mankweng community, the numbers of children whose parents are small businessmen from other African countries such as Zimbabwe and Nigeria are slowly increasing in local schools. They also observed that some of the children do not speak Sepedi at home, posing challenges to their ability to academically progress in schools using African languages.

The teachers also noted that the trend of children not using Sepedi as first language is rapidly growing within the local community, and also in local schools, as a result of their parents moving from outlying areas within the province to the Mankweng community in search of jobs or settling in proximity to the health services or higher education facilities available at Mankweng in the form of Mankweng Hospital and UL.

The school has six blocks built of cement, which are fully painted. The school also has additional mobile classrooms which, according to the teachers, were secured from DoE/DBE to ease overcrowding, which is pervasive in many rural-township schools. The school thus has four mobile classrooms which are used to house grades with too many learners. In this respect, the school is fairly well-resourced relative to other rural-township schools.

The school also has a vegetable garden and a sports field. It also has a computer room, with computers, which the teachers reported to have been donated by private companies. The computers, however, are unused, as the teachers claimed that they are too few to be meaningfully used.

The school admits learners from Grade R to Grade 7. The principal has her own office, with one computer, copy/printer machine, and a fridge. There is one staffroom with another photocopy/printer machine which is used by the rest of the teachers. In the staff room, there is no computer, but stacks of books are stored in

piles at the back of the room. The teachers do not have computers in their classrooms or in the staffroom, and can only make use of the photocopy machine in the staff room.

Classroom size, that is, the numbers of learners in each class, varies from about 40 to 55 learners**.** Each of the grades has three sections; for instance, in Grade 3 the school has Grade 3A, 3B and 3C, with learners averaging 44 in each section. In the FP, all learning areas are taught by one teacher; that is, each class is allocated one teacher, who then teaches and assesses all subjects taught to that class.

Research subjects

The subjects of the research were the teachers and learners of Grade 1 and Grade 3 in the school. Overall, the study involved five teachers from this school in Mankweng in Limpopo Province. The data were based on classroom observations of and interviews with the teachers. The observational data were drawn from both the regular lessons and the intervention lessons. In the study, data from the regular lessons refer to the routine lessons taught by the regular teachers recorded within the naturalistic setting of their own classrooms. In the intervention lessons, the academic researchers became the teachers, and hence the approach to teaching and the use of materials in the classroom were different but within the constraints of the classroom, that is, with no material change to the set-up of the classroom or curriculum.

Planning the intervention lessons

Based on observations of the regular lessons, an analysis was undertaken to review the lessons in terms of teachers' teaching methods, range of strategies, and the use of materials. Drawing from an impressionistic analysis of the regular teachers' pedagogic practices, the researchers designed intervention lessons based on a different set of assumptions about teaching and learning, to present to teachers a different way of engaging learners and using materials. The intervention lessons were based on three considerations: firstly to maximise classroom interactions to facilitate the learning process; secondly to tap into learners' higher-order thinking skills, and lastly, and most importantly, to maximise opportunities for the learning of new concepts and skills, which is the ultimate goal of formal education.

During the intervention lessons, the regular classroom teacher and other teachers of the same grade were invited to observe the lessons, and give feedback on the lessons, a practice which is the opposite of what normally happens, where classroom researchers give feedback to practising teachers. The intervention lessons were implemented on a small scale, in contrast to mass-based teacher-training approaches characteristic of district-level initiatives.

Data-collection procedures

Lessons were audio- and video-recorded, as well as field notes taken to enrich the recorded data. Field notes enabled the researchers to record and remember salient aspects of the classroom and activities not fully captured by the recording devices.

Video data enabled the slow and multiple viewing of classroom events and allowed secondary analysis (by researchers who were not part of the primary research and data collection). The viewing of data by many people with diverging perspectives inevitably enriched the analytical process. It is for this reason that in this study, video recordings formed the core of the data collected in both the lessons and the interviews. Video recordings play an important role in data gathering, and effectively provide the researcher with a definitive tool to investigate how educational processes and practices are co-constructed by the teacher and the learners.

Interviews are a rich tool in research, and can allow researchers to gather complex, subjective data from research subjects. In the current study, semi-structured interviews were used to provide space and time for teachers (as subjects of the study) to reflect on their conceptualisations of literacy. The protocol used for the teacher interviews is attached as Annexure 2. The questions explore demographic information about the school, questions based on language and literacy learning and lastly, reflective questions based on the intervention lessons. The emerging dialogue during the interviews was meant, therefore, to enable the researcher to probe what teachers consider essential to the learning process, such as the availability and use of resources in the school. Semi-structured questions are key to the interviews, as they would offer a measure of planning but also enable a line of questioning that emerges from teachers' responses to questions. The semi-structured nature of the interviews would also allow time and space for issues to be raised by the interviewees that had not been anticipated or planned for. It was expected that teachers' responses would provide interesting and persuasive pieces of evidence linking the conceptualisation of literacy with their current practices.

Lessons observed

Seven regular lessons and six intervention lessons were observed and audio- and video-recorded. The observations occurred over the period 5 February to 5 March 2013. For the regular lessons, four of lessons were in Grade 1 classrooms while three were in Grade 3 focusing on a Sepedi HL lesson, English FAL and Numeracy lessons. In the interventions lessons, the focus was on Sepedi HL (two lessons, one each to Grade 1 and Grade 3) and EFAL (four lessons, two each to Grade 1 and Grade 3).

The classrooms in the school observed were furnished with posters on the walls (some of the display texts were handwritten while others were printed); most of them were predominantly about fruits, shapes, names, months, numbers and seasons of the year. At the back of the classrooms, copies of workbooks (mostly learner workbooks) were stacked for storage, as learners are not allowed to take them home. There are no materials for reading for pleasure, and much of learning and teaching is based on the workbooks provided by the DBE. In addition, scribblers for writing practice are also placed at the back of the room, and are retrieved for use by the students only when instructed to do so by the teacher.

Details of the regular lessons and the intervention lessons are provided in Table 5.1.

Table 5.1: Breakdown of lessons observed in Limpopo (sample)

Date	Grade	Subject	Nr of learners	Teacher	Duration (min:sec)
Regular lessons					
5 Feb 2013	1C	Numeracy	27	A	18:40
5 Feb 2013	1C	Sepedi HL	27	A	17:00
5 Feb 2013	1C	English FAL	27	A	33:08
6 Feb 2013	3B	Numeracy	28	B	18:23
6 Feb 2013	3B	Sepedi HL	28	B	29:19
6 Feb 2013	3B	English FAL	28	B	33:35
13 Feb 2013	1A	Sepedi HL	42	C	51:21
Intervention lessons					
4 Mar 2013	1A	English FAL	46	D	49:33
4 Mar 2013	1A	Sepedi HL	46	E	39:52
4 Mar 2013	3B	English FAL	39	D	49:54
5 Mar 2013	3B	Sepedi HL	39	E	46:03
5 Mar 2013	3B	English FAL	39	D	59:37
5 Mar 2013	1A	English FAL	46	D	52:49

The six intervention lessons were taught by two academics from UL. The English lessons were facilitated by a senior experienced lecturer (Teacher D) and the Sepedi HL lessons were taught by a postgraduate researcher (Teacher E). The reversal of roles, that is, the "researcher-as-teacher" allowed the researchers to experiment with various teaching strategies based on theoretical ideas very different from the regular teachers' beliefs.

As can be seen from Table 5.1, relative to the regular lessons, the number of learners in the intervention lessons was larger because the number of parents' consent forms returned was much higher, making the classroom size closer to the actual classroom size. Compared to regular lessons, the lessons were significantly longer, to some extent exceeding the allocated time for each subject on the timetable. The classroom teachers were tolerant and patient enough to allow the researchers to exceed the allocated time so as not to curtail the learners' participation.

Teacher interviews and focus groups

One-on-one interview sessions with teachers were recorded just after each lesson; and focused narrowly on soliciting information from teachers about the lesson they had just taught, and sought to gather from teachers their goals and teaching practices, and their perceptions about the efficacy of their teaching practices.

In addition, focus-group interviews were used to gather insightful information about varying aspects impacting on learning and teaching, including demographics and administrative aspects, for instance, questions based on material resources in the school, and other contextual factors impacting their teaching. The depth of discussions among the teachers was expected to help to energise each other to participate in the conversation. This would make the data multi-voiced and capture differing insights from the teachers. For the interviews, a semi-structured interview protocol was designed (Annexure 3). The questionnaire used in this study included both open-ended (unstructured, free-response) and close-ended (structured, fixed-response) questions.

During the focus-group discussions, four teachers were participants, and the data-collection instruments comprised of the following:

- Section 1: Demographics: focusing on information about teachers' background, qualification and experience including related information.
- Section 2: Literacy and language: focusing on teachers' views about how best to teach literacy, including what constitutes literacy and their own views about what a literate child should be able to do.
- Section 3: Debriefing and feedback on video recordings where the focus was on engaging the teachers on the classroom data contained in the video recordings in order for the researcher and teachers to develop a common understanding of the data.
- Section 4: Questions on intervention lessons: this section aimed at getting teachers to study the footage from intervention lessons in order to establish what aspects of the teaching strategies do they consider do-able, and those not do-able, and in the context of the review confront their implicit theories of effective and ineffective teaching practices.
- Section 5: Questions related to teachers' views about current teacher professional support and development models. This section aimed at establishing information from the teachers about their training, and levels of support they are receiving in order to effectively carry out their roles in classrooms.
- Section 6: Questions based on teachers' knowledge of assessment and education quality in South Africa. Questions in this section enquire from the teachers about their knowledge of current and previous literature on education quality, and education administration in South Africa.

Joint video review sessions with teachers

In addition to the above, joint video review sessions were organised, in which selected video clips from the regular and intervention lessons were jointly viewed and discussed by the researchers and the regular teachers. This enabled the researcher to come to a common understanding (with the teachers) about aspects of their teaching, their lesson objectives, and whether such lessons came close to what they intended to do.

Data-analysis procedures

This section deals with how the data were analysed in order to address the research questions, namely what are the language and literacy practices of teachers in the FP and what conceptions of literacy underpin these practices. Qualitative data analysis allows a systematic process of selecting, categorising, comparing, synthesising as well as interpreting so as to provide understandings of classroom events. The qualitative paradigm enables researchers methodologically to transform large amounts of data into succinct statements of patterns and routines in the pedagogic practices observed in the classroom.

Due to the large number of lessons recorded in both the regular and intervention phases of teaching, not all the data could be transcribed. Hence there was a deliberate process to review the video data and select specific literacy events (episodes involving interaction around texts) for transcription. Repeated viewing of the video data enabled the selection of a few key literacy events from both the regular lessons and the intervention lessons. These key events captured the predominant routines typical of the two types of lessons.

The selected episodes from both the regular and intervention lessons were transcribed, with the transcripts incorporating both verbal and non-verbal aspects and notes to capture the use of materials, movements and actions and other contextual information. In the case of Sepedi lessons, English translations were included in the transcripts. The transcriptions were cross-checked and verified in the light of the video data. It is important to remind ourselves that transcription is a theory-laden theoretical process, suggesting that the choices researchers make on the design of transcripts enact the theories they hold, and the kind of analysis one may engage in. For the purpose of this study, it was essential for the transcripts to reflect both verbal and non-verbal communications, as they are essential to capture classroom interactions fully. Working from the transcript, the researchers were able to study patterns of turn-taking and distribution of classroom talk, which would illuminate teachers' classroom repertoires, and their approaches to teaching and learning.

For the interview data, the researchers used interpretive strategies to discover the participants' attitudes, perceptions, understanding, knowledge, values, feelings and experiences to approximate their construction of social practices that they were engaged in. The content analysis focused on the common themes that emerged in the responses of the teachers and the differences between them. The responses from all the teachers on each of the interview questions were closely examined to establish these similarities and differences

Constructivist orientation

As pointed out earlier, this study has its theoretical foundation in constructivism, according to which learning by children occurs through social interactions with experienced adults or more capable peers (Vygotsky 1934). Teachers therefore model behaviours and/or provide verbal instructions to their learners, and also negotiate patterns of checking, clarifying and extending meaning during talk. A Vygotskian view of

learning involves children seeking to understand the actions or instructions of their teachers, leading to the internalisation of this information in order to use it to guide or regulate their own performance.

Drawing from Vygotsky's central concept of mediation, the researchers were interested in how the teachers use classroom discourse to facilitate meaningful learning and advance learners' cognitive thinking skills. This is essential, because within constructivism, teaching is an act of extending a child's natural abilities; teaching that is unable to make learners move beyond their everyday knowledge mostly results in epistemological impoverishment and contributes little towards learners' cognition. It was therefore considered worthwhile to explore how teachers progressively direct classroom discourse to cross the bridge between everyday knowledge to scientific/academic knowledge.

As is well-accepted, the visible process of teaching and learning is made up of patterns of interaction between teachers and learners (and among learners themselves), in the form of asking questions, responding and reacting. The kind of engagements and interactions taking place in the classroom therefore shapes learning in profound ways. Classroom interaction analysis is intended to provide evidence of the differences in teaching patterns, which distinguish one teaching style from another. In this study, interactional analysis is a valuable tool of analysis in order to understand how teachers maintain a classroom climate conducive for learning. It is also vital to the understanding of turn-taking and distribution of talk.

In order to engage in such an exploration, the study made use of established analytical frameworks to analyse classroom discourse (for example, turn-taking), but additionally included Cummins' Four Quadrants framework (1996), and Prabhu's three types of tasks (1987), which may be seen as useful tools for analysing data from naturally-occurring classroom interactions.

5.1.2 Teacher profiles

Before presenting the analyses of some classroom episodes, it may be useful to give a brief account of the teachers' qualifications and experience, to understand how these might have shaped their beliefs about language and literacy learning and their classroom practices. The table given below summarises this data

Table 5.2: Teacher profiles (Limpopo)

Participant-teachers	***Teaching experience***	***Mother tongue***	***Grade taught***	***Allocated subject***	***Qualification of teacher***	***Period spent teaching at this school***	***Subject trained for at university***
[35]Teacher A	N/A*	Sepedi	Gr 1	All subjects for the grade	B.Ed	N/A*	N/A*
Teacher B	15 years	Sepedi	Gr 3	All subjects for grade	B.Ed	Since 1998	English, Biology & Sepedi

[35] Though one lesson of this teacher was observed and recorded, she dropped out of the project and did not attend any of the other lessons as an observer or participate in the interviews or focus group discussions. The principal later informed the researcher that this teacher was due to retire in a few months.

Participant-teachers	*Teaching experience*	*Mother tongue*	*Grade taught*	*Allocated subject*	*Qualification of teacher*	*Period spent teaching at this school*	*Subject trained for at university*
Teacher C	[36]N/A**	Sepedi	Gr 1	All subjects for the grade	B.Ed	N/A**	N/A**
Teacher F	12 years	Sepedi (can also speak Venda)	Gr 3	All subjects for the grade	BA + PGCE	Since 2003	Xitsonga, Biology, English and Northern Sotho
Teacher G	17 years	Sepedi	Gr 3	All subjects for the grade	B.Ed	Since 2004	Sepedi, English, Geography

As can be seen from Table 5.2, all the teachers are female, and are mother-tongue speakers of Sepedi. In the FP, teachers are allocated to a particular class and teach all the subjects to that class. The table also shows that the teachers had professional training related to language studies and/or teaching, and other content subjects, such as Biology and Geography.

It was also established that the minimum qualification held by the teachers is a Bachelor's degree (B Ed) except for one teacher who has a BA (in Linguistics) and went ahead to do a post-graduate certificate in education/teaching (PGCE) to qualify as a teacher. All the teachers thus had formal training at university level. The teachers were also highly experienced, with the least experienced having 12 working years, while the most experienced had been working for 17 years.

The analysis of the classroom data is now be presented, beginning with the data from the regular lessons taught by the teachers in the school. The focus will be on the teachers' pedagogic practices and how they enact the curriculum.

5.1.3 Analysis of the regular lessons

This presentation and analysis will draw excerpts from transcripts of the lessons in order to make visible the interactional pattern of the lessons, and participant roles in the learning process.

Analysis of Sepedi HL lessons

The first lesson was a Grade 1 Sepedi HL lesson, and was planned ahead to be a shared-reading lesson. Though not explicitly stated, the ostensible aim of the lesson was to get the learners to decode text and engage in a joint process of meaning-making. Before the lesson could start, the teacher instructed learners to move to the front of the classroom to make a huddle in front of the chalkboard. The learners were seated on the floor, while the teacher sat on a chair right in front of them holding an A3-size picture storybook, which is referred to by the teacher as the Big Book (see Figure 5.1). The first part of the lesson involved the teacher taking the learners through pictorial illustrations on the cover page of the book, and the teacher randomly selected learners to report on whatever they see on the page. This was followed by the learners reading the large script with each picture together in chorus. The implicit aims of the lesson therefore appear to be to get learners to construct and express their own formulation of what a picture

[36] The teacher was attending a training workshop during the interview sessions and could not therefore take part in the interview or focus group discussions. Some data for this teacher is therefore not available.

entails, using their existing vocabulary, after which they had to practise their reading skills by reading the accompanying sentences in the story book. Shared storybook reading can serve different purposes (e.g., to introduce new vocabulary as a precursor to a phonics lesson to teach a specific sound, to build comprehension via the modelling of pre-, during- and after-strategies, to familiarise learners with a particular genre of text, as a precursor to a writing activity, etc.).

One of the key factors which have an overwhelming impact on teaching and learning is the kind of questions teachers ask in their lessons. Looking at Transcript 1, the teacher's questions show a consistent pattern, by following the "what-question structure". "What-questions" are generally information-seeking, and according to Prabhu (1987, p. 46) they refer to any activity involving a transfer of given information from one person to another, or from one form to another, or from one place to another, generally calling for the decoding or encoding of information from or into language.

Looking at Excerpt 1, teacher questions such as "What do you see in this picture?" and "What is that girl riding?"(in line 8), thus fall into this category of questions.

Figure 5.1: Seating arrangement for the shared reading activity and the Big Book with Teacher C.

The task was fairly simple as the many of the learners could be seen with their hands outstretched vying for the teacher's attention for a turn to speak. Transcript 1 captures this lesson:

Transcript 1 Excerpt 1: Teacher questions by Teacher C

Original utterance in Sepedi	English translation	Non-verbal aspects and actions
5 T: A re ye Mo., le bonang, bolelelang godimo…bolelela godimo.	*T: Let us go, Mo., what do you see? Speak louder, speak louder!*	
6 L: Ke bona ngwanenyana le mošimanyana ba swarane.	*L: I see a girl and a boy holding one another.*	The learner remains seated.
7 T: O re o bona ngwanenyana le mošimanyana ba swarane. Eh…. Mm. e na o bonang?	*T: She says she sees a girl and a boy holding one another. Eh….Mm., what do you see?*	Teacher points at a Learner.
8 L: Ke bona ngwanenyana o nametse mozwinki.	*L: I see a girl on a swing.*	A girl rises up on her knees.
9 T: Ngwanenyana o nametse eng?	*T: What is she on?*	
10 Ls: Mozwinki.	*Ls: A swing.*	Few Ls respond spontaneously.

Original utterance in Sepedi	English translation	Non-verbal aspects and actions
11 T: Ke nnete?	*T: Is that true?*	
12 Ls: Yes mam.	*L: Yes mam.*	
13 T: O mongwe a ka reng? .... A re ye.	*T: What can the others say? Let`s go.*	Learners raise their hands and click their fingers. T looks at a boy.
14 L: Ke bona mošimane a sepela.	*L: I see a boy walking.*	Raising himself slightly.
15 T: O re o mošimane a sepela. Boela kua morago o tle o bone ga botse. A na ge le lebeletše mo ke kae na?	*T: You say the boy is walking? Shift backward so that you can see clearly. When you look here, what do you see?*	The teacher indicates with her hand that he must move a bit back.

In the excerpt, the teacher (T) distributes turns among learners (Ls) to report on what they see in the pictures. The teacher starts in Line 5 by affording the first learner a turn to speak (in Line 6), and in Line 7 the teacher implicitly accepts the learners' answer by restating what she said, and restarts the line of questioning to another a learner within the same turn.

The teacher again implicitly accepts another learner's answer from Line 10, who observed from the picture "a girl on a swing", and the learner thus used the Sepedi transliterated term "mozwinki" as an equivalent to the English concept "swing". In Line 13, the teachers calls upon other learners to mention some of the things observable from the picture, of which the third learner responds in Line 14, and following the same pattern as with others, there was no explicit feedback to the learner.

Continuing with the lesson, the same structure of teacher question is still persistent. Learners are called upon to articulate what they see in the teacher's book.

Transcript 1 Excerpt 2: Teacher questions continued

Original utterance in Sepedi	English translation	Non-verbal aspects and actions
21 T: OK, a re buleng letlakala. A ha.., ka mo go ka be go diega eng?	*T: Ok, let us open the page. Aha... What is happening here?*	T pages through book. Most Ls raise hands and click fingers.
22 L: Re bona mošimanyana o a kitima.	*L: We see a boy running.*	
23 T: Ba re mošimanyana o a kitima. Ke nnete?	*T: They say the boy is running. Is it true?*	All the hands go up.
24 Ls: Yes mam.	*L: Yes mam.*	
25 T: O mongwe e na a ka reng?	*T: What can another one say?*	All the hands go up.
26 L: Re bona mosadi a reila koloi.	*L: We see a woman driving a car.*	L starts spontaneously.
27 T: Mosadi ba re ka mo le ena o reila koloi. Go kaba go diegang? Mošimane o kitimela kae?	*T: They say that a woman is driving a car. What is happening? Where is the boy running to?*	A few Ls raise hands.
28 L: Sekolong.	*L: To school.*	

As seen in Lines 22 and 26, the learners could confidently and spontaneously handle the illustrations and pictorial aspects of the text.

It is vital to highlight that teacher questions are embedded in teachers' classroom practices, and therefore tend to reflect the teachers' own pedagogic approach and how they perceive learning. The teacher's questions as seen from the transcript make little cognitive demand on learners and the teacher seems to be aware of it, hence she rarely gives feedback to the learners. The teacher seemed to be operating on the basis that the learners already know what is being dealt with in class, as the knowledge forms part of the learners' everyday knowledge, hence there is no need for explicit feedback. Consequently, the learners don't necessarily move beyond what they already know, which ought to be a key consideration in knowledge and academic literacy.

Prabhu (1987) has shown that though "what-questions" may serve other conceptual purposes in the broader matrix of learning, they are by far the least cognitively challenging relative to questions involving children's reasoning capacity and those seeking to get learners to articulate their opinions, and their subject positions.

The lesson continued with the teacher reading the story line by line and the learners chanting after her. During the group reading, it was evident that the learners could handle simple texts, though the text itself made little cognitive demand on the learners. From this lesson, two insights were generated about teacher practices: firstly, it was apparent that discussion on the illustrations and other features of the book took far more time than was given to learners' engagement with text. Secondly, though the teacher was able to involve learners in answering simple questions, her pedagogic practices did not enable the learners to become independent readers. The teacher reported that this is how she would usually handle her shared reading lessons.

At another level, far too much time was spent on repeating sentences, and, as a result, there was little opportunity for the teacher to engage the learners in structured reading and understanding of the text.

The second Sepedi lesson involved another teacher in Grade 1, also using a Big Book, titled "*Na Lapa ke eng*?" (What is a family?*)*. In this lesson, the teacher was modelling to the learners how to read the title of the book. In addition to practising basis reading skills on the basis of the text accompanying pictures, another implicit aim of the lesson assumedly was to explore the vocabulary and conceptual comprehension related to the "family members". This lesson also captured the teacher's difficulties with engaging learners in decoding texts.

Transcript 2 Excerpt 1: "Focus on form" by Teacher A

Original utterance in Sepedi	English translation	Non-verbal aspects and actions
4 L: Na .. la .. pa .. ko ...	*L: What .. is fa .. mi .. ly .. at ...*	The learner reads as the teacher points to the words.
5 T: ke	*T: is*	
6 L: ke	*L: is*	The teacher looks at the learner as she (the teacher) says the word each time.
7T: ke	*T: is*	
8L: ke	*L: is*	
9T: ke	*T: is*	
10L: ke	*L: is*	

Original utterance in Sepedi	English translation	Non-verbal aspects and actions
11T: ke	*T: is*	
12L: ke	*L: is*	
13T: ke	*T: is*	
14 L: ke	*L: is*	
15T: E tšere modumo wa eng? ... e	*T: Which sound does it have? ... it.*	The teacher points at the word in the book
16L: e	*L: it*	
17T: e .. ke .. ekwa .. e .. ke .. e .. ke, bona*, ke..	*T: it .. is .. listen .. it .. is .. it .. is .., look, is ..*	The learner nods
18L: ke	*L: is*	
19T: e	*T: it*	
20L: e	*L: it*	
21T: e ... ng. A re bale gape. A re ye Ma., nke o traye wena. A reye.	*T: What? Let us read again. Let us Ma., you try. Let us go.*	T points out a girl at the back, who gets up

What the teacher did was to break the sentence into smaller parts and focus on the phonetic aspects of the language of the text. In Lines 5 to 14, the teacher instructs one learner to repeatedly articulate the Sepedi word "ke", until the teacher is convinced that the learner has got it. This attests to the teacher's internalised notion of literacy learning and embedded in it seemed to be teachers' belief that learners best grasp language ritualistically and through routinised repetitions involving memorisations and recall.

This excerpt could be interpreted as an extreme form of phonics. The "focus on form" in the lesson was so pervasive that the teacher delayed getting learners to negotiate the meaning of the concept "family", which was the key concept in the text, till the end of the lessons once she was convinced that the learners can articulate individual units of the of the sentence "*Na Lapa ke eng*?". The construct "focus on form" is used here to recapture Long's description (Larsen-Freeman & Long, 1991, pp. 45-46) of a pedagogy where classroom instruction is limited to a narrow focus on discrete points of language (such as pronunciation, sound-letter correspondence, etc.) in isolation, with no apparent focus on meaning, even in contexts where meaning-focused engagements would result in the affirmation of learners and better understanding of concepts.

Transcript 2 Excerpt 2: Negotiating the meaning of family

Original utterance in Sepedi	English translation	Non-verbal aspects and actions
45T: OK, le a bona gore lapa ke eng? Ke mo geno ... m … papa, papa e lego tlhogo ya ka gae, tlhogo ya mobu, the head of the family, ke papa….and then gwa latela mang?	*T: OK, can you see what a family is? It is at your home... father, father who is the head of the family, head of the soil who is the head of the family, the head of the family who is the father. And then who follows?*	
46Ls: Mama.	*L: Mother.*	By a few learners.
46 T: Gwa latela mang?	*T: Who follows?*	
46 L: Mama.	*L: Mother.*	By a few learners.
47T: Gwa latela mma, mma e leng	*T: Mother is next, mother who is the*	Teacher talks fast

Original utterance in Sepedi	English translation	Non-verbal aspects and actions
mothuši wa, wa papa, the helper. Mma ke mothuši, mola papa e le tlhogo ya lapa…mamago o thuša papa, o thuša papa ka eng? Ka go mo eletsa, ka go mo direla tsa ka mo lapeng….E bile ke moeletsi wa gagwe. Ge re le ka lapeng, re a eletsana, o la o fa mogopolo, o mongwe o fa o mongwe kgopolo….Re a kgopotšana, ge re etla go godiša bana. Wena, wena. ... R e tla o dule mo. Batho ba go se theeletše ba tla dula mo pele. Nabile ba re lapa ke eng? Re bone mo ke eng? Ke papa. Le a mmona, a re boneng. Mpotseng mo, ke mang o? ... (pause)	*helper of… of the father, the helper. Your mother is helpful, while your father is the head of the family; your mother is helping your father. She helps him with what?... by advising him, and by doing everything for him in the family. She is even his advisor. When we are at home we advise each other. We remind one another in the growing up of the children. You, you R come and sit here. People who do not listen will sit in front. By the way what is a family? We saw what is here? It is the father. Can you see him? Let us see? Tell me, who is this one here? ... (pause)*	and explains using the picture on the cover of the book she holds up. The teacher points to a desk at the front. Teacher points out a figure in the cover picture.

The teacher's approach to the concept is through articulating the roles of members in what would normally be a traditional family set-up, consisting of a father, mother and a child. The father acts as the "head of the family" (in Line 45), and the mother stereotypically becomes the "helper" or "advisor" to the father (in Line 47). No other form of family structure is brought into the discussion, even though it is likely that some children might belong to single-parent homes.

The Sepedi HL lessons have shown a consistent pattern in teachers' routine and pedagogic practices, among others the overwhelming dominance of oracy during learning and teaching, with little or no writing taking place. Repetitive reading is still a dominant feature in teachers' pedagogic practice, as observed in the lessons. This has lead us to speculate that the use of repetition has more to do with keeping learners preoccupied and busy, or engage in what Hornberger and Chick (2001) refer to as "safe-talk", which reassures teachers that something is happening in the classroom while in fact little learning is taking place.

Analysis of the English FAL lessons

Two English FAL lessons were observed in both Grade 1 and 3.The analysis of these lessons is presented through the researcher's field notes and commentaries.

- **Teacher practices**

The first English lesson observed was in Grade 1 and was facilitated by Teacher A. The aim of the lesson seems to have been the oral revision of a song that the learners had already learnt relating to parts of the body. The lesson seemed to reinforce the pattern observed in the home-language lesson, that is, the overwhelming dominance of oracy with little or no writing taking place. The teacher starts the lesson with rhythmic chants of a song called "*Head and shoulders, knees and toes"* while learners touch their heads, shoulders, knees and toes, in-sync with the tune. The singing and gesticulation persist over three to four minutes.

> *As the lesson progresses it became evident that the lesson is based on "parts of the body". The teacher instructs the learners; "Show me your head!" with learners responding by saying "This is my head" (with pointing gesture). The learners proceed to further pointing actions, showing their eyes and then ears, under the instruction of the teacher. The learners would then say out loud, "These are my eyes",*

"These are my ears", etc. The teacher affirms, "I want you to pronounce correctly" … with the lesson lasting over 30 minutes. The lesson is not based on a workbook, but the teacher draw learners' attention to a poster at the back of the classroom wall showing the human body with the parts labeled.

Field notes (5 Feb 2013)

The teacher's pedagogic routine can be characterised as following these five key steps:

- Firstly, the teacher would "show": The learners are shown something so that they understand the word, or sentence. For example, in the lesson, the teacher made use of a part of the body as a visual aid alongside gestures.
- Secondly, the teacher would then "say": The teacher verbally presents the word or sentence, taking care to pronounce the word correctly.
- Then the learners "try out": Here, the learners repeat what the teacher is saying.
- Then the teacher would "model" what was said again: The teacher does so by correcting the learners and by ensuring that they are pronouncing the words correctly.
- Finally, the learners are made to repeat the sentences and individual words a number of times. Here the teacher used a number of methods for repetition, including group repetition, single student repetition and chanting to get the learners to repeat the word.

The same teacher taught an EFAL lesson in Grade 3. The field notes below capture the teacher's pedagogic routines.

The teacher opened the lesson by directing learners to a comprehension reading text in the learners' workbook. A whole-class setting was used for reading aloud. It is difficult to say what the aim of the lesson was but is seemed to be practice of reading aloud. The teacher's approach involves asking the learners to read aloud as a whole class, with limited teacher input. The teacher only interrupts the chorusing of scattered voices of learners to correct them in pronunciation, to make a point about punctuation conventions. She makes few attempts to contextualise the text. As the learners proceed, only few voices start dominating with the rest of the class waning.

The learners read: "Thabo is three … he goes to the Green Tree Nursery School". The teacher interrupts and draws the learners' attention to a punctuational convention by saying "Thabo is three. There is a fullstop there". As the lesson progresses, the teachers continues with error correction until the whole text is completed, and repeatedly rereads the text up to four times.

Field notes (6th Feb 2013)

This deliberate focus on discrete skills (such as pronunciation and punctuations) over meaningful and focused engagement with texts as "goals of learning" was pervasive in the teachers' pedagogic repertoire and embedded in it in both L1 and L2. The teacher seems to have a limited range of teaching strategies, especially for reading.

After the reading exercise, there was a writing exercise in the form of dictation. This was the only form of learner writing observed during the entire period of the observations. In the task, three words are dictated to the learners to write in their scribblers, focusing on words with the sound "ee" from the text. The chosen words were "three", "street" and "keeps". The dictation task, however, shows that learners were unable to fully grasp either the pronunciation or the spelling of key words in the text. Some of the learners struggled with frequently used words such as "street" and "tree".

For Learner 1, all the entries were wrong. The learner mispelt the spellings of the selected terms for the dictation task, by writing "tee" instead of "tree", "shlereet" instead of "street", and "teree" instead of "tree".

- **Concept development during English FAL lessons**

The two lessons raise profound questions about reading strategies, among others, the probably contentious one, of whether pronunciation and spelling can be taught explicitly as objects of study. Cummins (1996), through his "iceberg-metaphors" has long argued that a narrow focus on visible,quantifiable and formal aspect of language leads to the internalisation of surface features at the expense of less measurable aspects of proficiency such as coding and decoding meaning of texts. By implication, Cummins' thesis suggests that an exlusive focus on discrete skills such as pronunciation and grammatical conventions as objects of study, especially in early literacy, are likely to result in epistemological impoverishment, and through them children's ability to make sense of new concepts and knowledge is significantly lowered.

Table 5.3 attempts to apply Cummins' four quadrants metaphor (1996) to the kinds of learner effort required in the regular lessons. Cummins drew distinctions between Cognitively-Demanding versus Cognitively-Undemanding (a measure of learners' cognitive effort to meaningfully engage classroom instructional practices and tasks), and how such engagements make varying demands on learners, both in terms of thinking and language. Using Cummins' framework, the kind of learning experiences exemplified in these regular lessons can best be captured by the table below.

Table 5.3: Cognitive effort of learners in EFAL lessons

Cognitively undemanding

Context-embedded	**A** EVERYDAY KNOWLEDGE & LOW-ORDER LANGUAGE FUNCTIONS	**C** ●Rote recall and memorisation Including rhythmic chants ●Naming parts of the body in group ●Pointing actions and repeating after the teacher ● Chorusing ● Pronunciation of words 'What-questions'; which demand little cognitive effort of learners.Language-specific tasks like **dictation** and **spelling** falls into this category.	**Context-reduced**
	B	**D** ACADEMIC/SCIENTIFIC KNOWLEDGE & ACADEMIC LITERACY	

Cognitively demanding

By far the most demanding of the instructional practices from the EFAL lessons, was dictation, but within the broader scheme of language and literacy learning, is a very low-level activity and can only be placed in Quadrant C. Classroom practices like pronunciation, dictation and chorusing are by nature language-specific and make little cognitive demand on learners,and when teachers engage learners,they are mostly done undesirably through routinisations and repetitions. This contributes to the impoverishment of concept and literacy development in those classrooms.

The difference between Quadrant C and A activities is that Quadrant A activities are embedded in human interactions, and learners can thus draw from each other's experiences while in Quadrant C, learners receive less or none of the contextual support to help them solve problems. However, none of the activities in either A or C are cognitively demanding.

As seen in Table 5.3, Quadrant C is the area where most of the regular lessons are concentrated. This quadrant is, however, characteristic of low cognitive learning, and by far the least academic quadrant as there is minimal epistemic learning taking place.

The epistemic impoverishment of both the lessons attests to the reality that teachers' operationalisation of CAPS and the theory underpinning their pedagogic practices are misguided. This analysis points to the reality that there is little concept development taking place in the EFAL lessons, as no new concepts have been acquired by the learners from the learning experience.

Analysis of the Numeracy lesson in Sepedi

The rationale for the addition of a content lesson in Numeracy was to observe how complex and abstract concepts and mathematical operations are dealt with in the FP using the mother tongue. There were two lessons observed in both Grades 1 and 3. The lessons reinforced the notion that teachers misconstrue mother-tongue teaching of content lessons as language lessons in which they immerse learners in mother-tongue discourse, without any meaningful engagement. The aim of the Numeracy lesson was to teach the concept "odd" and "even" numbers, but the teachers was unable to put these concepts across.

This deliberate process of teaching the conversion of English to Sepedi numerals was observed in both Grade 1 and 3 lessons, in addition to chorus counts from1 to 100 by learners. These lessons pointed to the reality that much of teachers' lived realities in classrooms, even in content lessons like Numeracy, demonstrate little evidence of joint intellectualisation of content taking place in classroom. Even when attempted, learners are rarely engaged in rich mathematical discourse.

In both Grade 1 and 3 lessons, reciting Sepedi numerals occupied the largest part of the lessons, as the learners were instructed to read-out loud. This was not only time consuming, but denied learners opportunities to meaningfully engage with mathematical operations.

Being in the FP, both the Grade 1 and 3 lessons were taught in the Sepedi language medium, the mother tongue of the learners. However, much of the classroom exchanges were centred around getting learners to understand the Sepedi equivalents of English numerals, and how to count up to 100 using the Sepedi language. In other words, the knowledge of the home language was not deployed in teaching mathematical concepts.

5.1.4 Analysis of the intervention lessons

A brief analysis of the intervention lessons follow.

An analysis of the Sepedi intervention in Grade 1

The first intervention lesson was taught to a Grade 1 class (1A). The aim of the lesson was to develop learners' ability to produce connected text using the pictures as a stimulus. It was based on a picture story with three picture frames, in the following sequence:

a) The first one with a dog chasing a cat
b) The second picture frame, consisted of the cat climbing on a tree to escape from the barking dog
c) The third picture frame was a boy rescuing the cat from the tree.

The page from the learners' book is reproduced in Figure 5.2.

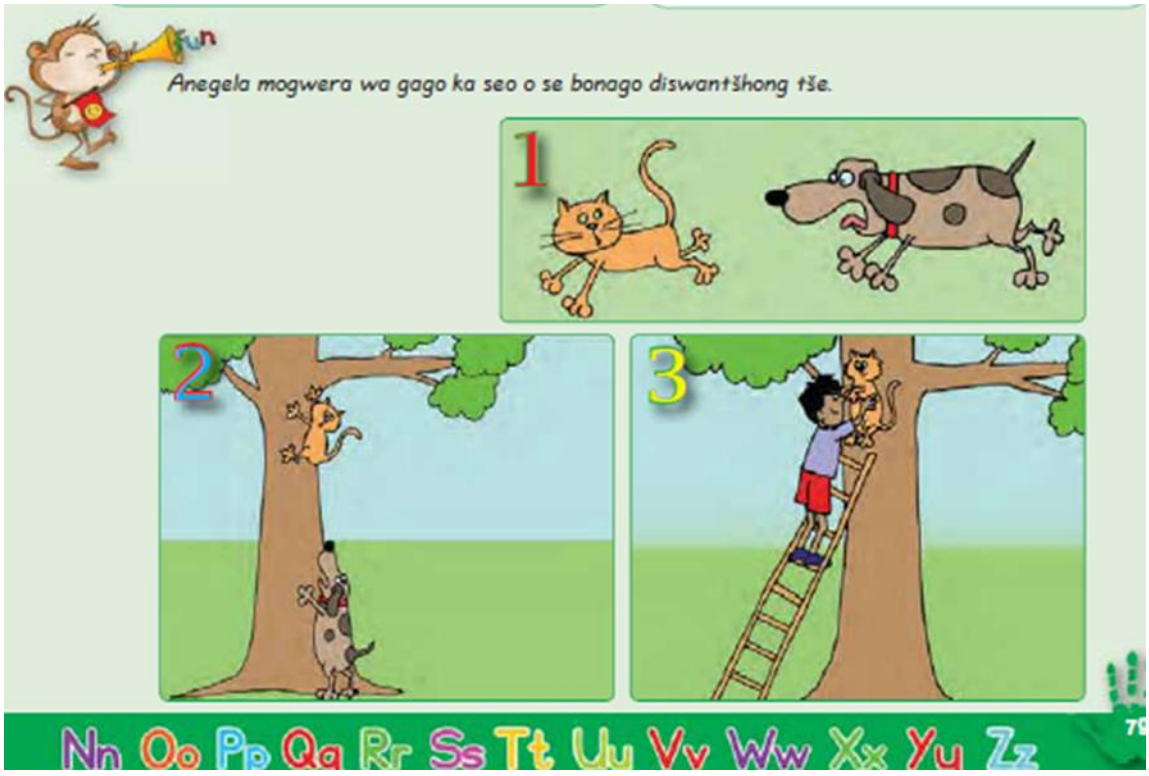


Figure 5.2: Picture story

The teacher first elicited oral descriptions from the learners, during which the learners described the events in the picture frames using their own words. After the description stage, the teacher invited learners to write those descriptions on the board in full sentences, using the picture story sequence as a guideline. The usefulness of the practice lay in demonstrating how teachers can integrate writing into their oral literacy practices, using age-appropriate and inclusive materials which learners can easily relate to. This easy-to-follow material was thus used as an entry into writing development. The lesson was very interactive, with learners enthusiastically participating in the construction of connected discourse.

Transcript 3 shows how the last sentence in the story was jointly constructed.

Transcript 3: Joint co-construction of text

Original Sepedi utterance	English translation	Non-verbal aspects and actions
43 Teacher: A re lebeleleng seswanšho sa boraro… Ke eng seo se diragalago fao?	*Let's look at the third picture* *What is happening in the third picture?*	 Learners raise their hand seeking the teacher's attention
44 Learner: Buti o fološa katse mohlareng …..	*"Buti" is getting the cat off the tree ….*	"Buti" is a Sepedi word to describe any "male sibling".
45 Teacher : O wa ifološa. O mongwe yena e kaba a bona eng?	*…he is assisting the cat to come down from the tree.* *Any other? What do you see?*	Learners raise hands for the teacher's attention as the teacher passes on the turn to other learners.
46 Learner : …..Buti o wa ifološa.	*… Buti is rescuing the cat.*	Another learner restates the initial statement.
47. Teacher: Wena o bona eng…?	*You, what do you see…?*	Learners raise hands for teacher's attention as the teacher passes on the turn.
50 Learner: …..Katse e thabile	*…..Katse e thabilie*	One learner responds.
51 Teacher (unclear)	*(unclear)*	
52 Teacher: Ok, ke mang a ka re ngwalelang seo se diregogo mo seswanšhong so boraro? Ok, a re lebelelang motho yo a e fološago …ke mang yena?	*Who can write a sentence for picture?* *Ok, let's look at the person rescuing the cat …who is it?*	Learners and teacher focus on the picture in the text
53 Learner: ……Ke buti!	*….it is buti!*	Learners respond!
54 Teacher: Ke buti goba mošemane akere. Le bona bjang gore ke mošemane?	*Is it buti or mošemane?* *How do you see that he's a boy?*	The teacher tries to bring to the learners' attention the distinction between "buti" which refers to "a male sibling" and "mošemane", which is a general term to refer to a "boy". Learners raise their hands seeking the teachers' attention.
55 Learner: Re bona…ka..ka hlogo….Ka borokgo.	*We see…by his head. …. by his pants*	One learner responds
56 Teacher: Re a kgona go ngwala mošemane? O dira eng mošemane Ke mang yena a tla re ngwalelang?	*Can you write the word Mošemane?* *What is the boy doing?* *Who can write for us?*	
57 Learner (writing): O fološa katse motlhareng*	*He rescues the cat from the tree*	Learners write the sentence on the board. The learner misspells the last word in the sentence.
58 Teacher: Ke yona?	*Is this correct?*	One female learner raises her hand. The teacher invites the learner to come and write the correct sentence on the board.

Original Sepedi utterance	English translation	Non-verbal aspects and actions
59 Learner: Mošemane-o-fološa-katse-mohlareng	*The boy rescues the cat from the tree*	A girl comes to the board to write the sentence.
60: A re baleng mo a ngwadileng gona.	*Let us read what has been written then.*	Pointing at the corrected version. Then the teacher invites learners to read the sentence on the board
61 Learners: Mošemane-o-fološa-katse-mohlareng.	*The boy rescues the cat from the tree.*	Whole class read aloud from the board.

In the lesson, the teacher's engagement with the learners occurred at three levels. Firstly, through elicitation, the teacher got the learners to describe the picture frames using their own words. Questions such as: "What is happening in the picture?" (in Line 43), are asked and the turn is rotated among learners (as seen in Lines 45 and 50). Even though learners to some extent restate the same points, the teacher provides a platform for learners to speak in the class, which increases their confidence levels and keeps them focused.

Secondly, the teacher draws upon learners' writing skills, by calling them to write sentences on the board. This was key, because it enabled the learners to make the connection between oracy and literacy, and begin to learn that writing is symbolic and meaningful, and that writing can be used to describe things. In Lines 52 and 60, the teacher calls upon the learners to come and write the sentences describing the third picture frame. Notable in Line 56 is that a learner writes "*Mošemane-o-fološa-katse-motlhareng"* with the last word wrongly spelt. The learners were able to spot the error, and one learner was called upon to help make up the final sentence with the corrected spelling, which was accepted by the rest of the class.

Thirdly, the teacher makes provision for peer learning, by allowing learners to draw upon each other's strengths. When learners struggle to successfully complete a sentence on the board, the teacher extends turns to other learners with only minimal input. The learners start peer-mediating each other and drawing upon each other's knowledge. A notable example, as already pointed out occurs in Line 57, when peers help to correct the spelling of a word. This form of co-construction grants agency to learners to meaningfully shape classroom discourse.

In Line 54 the teacher draws the learners' attention to the use of accurate vocabulary in texts, by pointing out that the image of a male in the picture frame is best interpreted as a boy (*mošemane*) than as a male sibling (as the word *'buti'* connotes).

Analysis of a Sepedi intervention lesson in Grade 3

The intervention in Grade 3 Sepedi was based on the same reading the Grade 3 Sepedi teacher used for the regular lessons, which was a short story titled "*Kanegelo ya Makgolo"*. The aim of the lesson was to get the learners to produce written text in their own words using their knowledge of a story they had read in their prescribed book. The lesson also followed the principle of immersing learners in writing activities using accessible texts in the learner workbooks. In this lesson, there was more focused reading of the text, followed by learners interpreting the paragraphs making up the short story in order to rewrite the story sequence on the chalkboard.

The lesson was aimed at serving two essential functions in the lesson plan, that is, to understand whether learners can meaningfully make sense of texts through their own effort, and how this experience can be integrated into writing development.

Firstly, three learners were assigned three paragraphs of the text to read, which they read fluently. Transcript 4 is an excerpt of the Sepedi intervention lesson, and exemplifies it.

Transcript 4 Excerpt 1: Individual learner reading

Original Sepedi utterance	English translation	Non-verbal aspects and actions
3 Teacher: Ke mang yena a ka re balelang temana ya mathomo ... ja, O tla thoma ka temana ya mathomo, a re theeletšeng.	*T: Who can read for us the first paragraph ... yes, you will start with the first paragraph, Let us listen.*	One L puts up her hand. T asks her to read.
4 Ls: a. Ke..., ke ... ka fao ke ithutileng go, go bopa, go bopa dipitša tše di botše. ... b. Kgalekgale, mola ke be ke sa le yo monnyane bjalo ke ... k..ka wena ... c. Ke be ke dula le mme le tate mo polaseng. d. Re be re na le dikgomo le dinku tše dintši. e. Fela re be re dula kgole le bagwera barena. f. Go be go sa ... Go be go se na le yo nka bapalago le yena. g. Ke be ke fela ke bogela mme ge a bopa dinkgo.	*Ls:* *That...that...that is how I taught myself to, to build, to build beautiful pots. ...* *Long long ago, when I was small ... like you, ...* *I was staying with mother and father at a farm.* *We had lots of cows and sheep.* *But we were staying far from our friends.* *There was ... There was no-one to play with.* *I used to watch my mother making calabashes.*	She stands up, picks up her book, holds it neatly and reads fluently.
5 T: OK, Dankie, eh ... o badile tema ya mathomo a kere? Ke mang ya ka re ballang ya bobedi?	*T: OK, Thanks, eh... she read the first paragraph, isn't that so. Who will read for us the second paragraph?*	

This kind of individual learner engagement with text was not observed in the regular lessons, as teachers predominantly opted for reading aloud and chorusing/group reading.

Secondly, beyond being able to read fluently in their mother tongue, learners, when instructed, were able to engage in sustained reflective talk with the teacher in the form of predictions and reformulations, thereby meaningfully engaging with the text.

Transcript 4 Excerpt 2: Teacher-learner engagement in reflective talk about text

Original Sepedi utterance	English translation
31T: Bjatše go, go diregang ge a bopa nkgo ya gae? Ke mang ya ka re bontshang gore go diregang?	*T: Now what happens when she builds her own calabash? Who can show us what is happening?*
32Ls: O ile a robetse pula ya thoma gona.	*Ls: While she was sleeping, the rain started falling.*
33T: O ile a robetse pula ya thoma gona, a kere? Gwa direga eng morago ga fao, nkgo ya gagwe ya …?	*T: While she was sleeping, the rain started falling, isn't that so? What happened then, her calabash ….?*

Original Sepedi utterance	English translation
34Ls: Ya fetoga leraga.	*Ls: It turned into mud.*
35T: Ya fetoga leraga. Ka morago ga foo gwa direga eng? ... Go diregileng ka morago ga fao? O ile a thakgala?	*T: It turned into mud. Then what happened...? What happened then? Was she happy?*
36Ls: O ile a nyama.	*Ls: She was disappointed.*
37T: O ile a nyama, a kere? Mm…ge wena ntho ya gago e o e ratang e ka senyega, o ka se thakgale, a kere?	*T: She was disappointed, isn't that so? Mm... If something that you like can break, you will not be happy, isn't that so?*
38Ls: Eng.	*Ls: Yes.*
39T: Re tlo nyama ka mokana garena. Ei, o thibile go nyama a dirang ka morago ga fao?	*T: We will all be disappointed. What did she do after, afterwards?*
40Ls: A thoma go bopa e nngwe.	*Ls: She started building another one.*

This excerpt exemplifies how teacher questions affect the kind of engagement that may take place in the classroom. In the transcript, directive questions, such as the one in Line 31, asking learners to show understanding of what they have read, not only enables learners to read reflectively but to start engaging texts for meaningful purposes. This kind of question not only requires oral skills, but draws upon learners' ability to decode texts.

In this lesson, the teacher's role was largely facilitative and consistently drew input from the learners to get them to reflect on various aspects of the text, including characters in the story, events in the story and the sequence of events shaping the story. In this way learners started to use their own voice to describe what they have read in the text, and describe how the story evolves after each event (as in Lines 32, 34, 36 and 40), and also use their own imagination to predict things based on their reading of the text.

After the reading activity, the teacher deliberately planned a writing activity during which he solicited insights from the learners on the picture story, to allow the learners to establish facts, events and scenes, which the learners incorporated into their production of texts. The move to draw learners into the co-construction of a text was empowering, because it enabled them to make critical decisions in the writing process about what information to include, and which one was less significant to the overall meaning of the text being written.

Transcript 4 Excerpt 3: Learner writing on board

Original Sepedi utterance	English translation	Non-verbal aspects and actions
55T: Ke mang a ka re ngwalelang lona? Makgolo o bogela mmagwe, O.... Makgolo, ...	T: *Who is it who can write it for us? Makgolo is watching her mother. She watches her ...Makgolo. ...*	
56 Ls: Makgolo o bogela mmagwe	*Ls: She watches her mother*	T calls L, who moves to the board, and receives the chalk to write the sentence: Makgolo o bopela mmagwe.
57T: A bopa ...?	*T: While building...?*	
58Ls: Letsopa.	*Ls: Mud pot.*	

Original Sepedi utterance	English translation	Non-verbal aspects and actions
59T: A bopa letsopa ... A re mo thuseng go le feleletša.	*T: She builds the mud (pot)... Let us help her to complete.*	
60Ls: A **bepa** letsopa	*Ls: She builds mud pots.*	L writes on the board: "**a bepa letsopa"** with the Sepedi verb "bopa" wrongly spelt.
61T: OK, ke yona.	*T: OK, it is right.*	
62Ls: Yes, ng..ng.	*Ls: Yes….yes....yes.*	
63T: Ke yona?	*T: Is that right?*	

Continuing from Line 60, where a learner wrongly spelt the Sepedi verb "bopa", as "bepa", the picture above captures an instance of peer-correction as a powerful tool for learning. This instance shows that democratising access to the chalkboard, and talk in the classroom, enables learners to engage in risk-taking activities and thereby becoming free to experiment and participate in the learning process.

The teacher's role was largely facilitative, and judgements about whether a word or sentence is wrong or right (and error correction in both reading and writing) were negotiated by the teacher and learners. Though much of the lesson is spent rereading and writing down ideas from the story, in-between there are discussions about the learners' writing on the board.

In such a learning environment, both the teacher and the learners begin to act as participant readers, treating everyone's writing seriously, and offering chances to discuss writing at all stages of the composition process, as pupils learn to appraise their own and each other's writing.

This session enabled regular teachers (who were observing the lesson) to see that learners can and will take initiative, write meaningfully and with elaborate syntactic sentences when given opportunities in the classroom. In addition, teachers may have seen that errors do not have to be dealt with punitively, but that error correction can be integrated as part of their pedagogy, and effectively part of the learning process.

Analysis of English (FAL) intervention lessons

Four EFAL intervention lessons (two each in Grades 1 and 3) were taught by Teacher D. The lessons were largely exploratory as the teacher, being totally new to the learners, had no prior knowledge of what learners were capable of doing. This meant that the teacher had to tentatively explore learners' proficiency levels in the act of teaching.

For instance, in the Grade 1 lesson, the teacher started the lesson with a simple rhyme only to find that the learners already knew the rhyme, and based on this understanding, the teacher progressively converted the rhyme into a literacy practice, and a learning opportunity. Retrospectively, the aim of the lesson was to use learners' knowledge of a familiar rhyme to promote letter and word recognition and thus progress from oracy to literacy.

Transcript 5: ABCD rhyme with Teacher D

Original utterance in English	Non-verbal aspects and actions
1 T: I am first going to teach you a song …. do you like singing?	
2 L: ……..	No affirmative response from the learners, though some nod their heads.

Original utterance in English	Non-verbal aspects and actions
3 T: OK, let me teach you how to sing … I will sing and then you will sing after me … okay.	
3 T: OK, let me teach you how to sing … I will sing and then you will sing after me … okay.	
4 L: Yes …	Whole-class response
5L: Alright … *Come little children come to me, I will teach you ABC ABCDEFG HIJ K LMNOP LMNOPQ RST UVW XYZ*	Teacher writes on the board. The learners join in the singing. The teacher is surprised.
4T: Do you know this song? Oh … you know the song! So, I am going to write the song here. *Come little …….*	Many of the learners knew the ABC part, and thus persistently nodded. Teacher starts writing on the board: "*Come little…..."*
5 T: What must come here?	
6 L: …. children	One learner softly mentions "children".
7T: Yes….children What must I write next....? *Come little children, come to me. I will teach you ABC ABCD EFG HIJ K LMNOP LMNOPQ RST UVW XYZ*	The teacher then completes the sentence. Scattered voices of the learners started singing, with the teacher writing the rhyme on the board.
8 T: Who can show me where is "B"? Do you know?	
9 L: ……..	The learner comes to the board and places his finger on the letter B.
10 T: Is she right..? Is she right? Okay, you stay here, come and show me "B".	
11 Ls: Yes, ma'am…yes ma'am!	

The teacher was keen on observing the learners' comprehension and oral production. Learners were generally able to understand, because the teacher spoke slower than usual, and gesticulated more. The teacher then instructed learners to think of words they know beginning with a specific letter (or speech sound) which tapped into learners' phonological awareness in a more meaningful and integrated way.

In another Grade 1 lesson, the teacher invited the learners to come and write their names on the board. It was surprising to see that most learners could do so, even if their names were quite long. She then asked learners to identify names beginning with a certain sound like "m" or "p".

As exemplified by the lesson, teachers do not need textbooks to begin teaching phonological awareness, because children come to school comfortable with their names which could then become key entry points into literacy learning. The learners get to see that writing is symbolic, and that letters stand for sounds in their names. Furthermore, such a learning experience could make learners start thinking about sounds, letters of the alphabet and words in a more meaningful way. The use of learners' knowledge (of how to write their names) makes teaching literacy learning personal, since this enables teachers to tap into learners' personal experiences, transforming their knowledge about sounds in their names, into letters in their months of birth (as in a Grade 3 lesson) , and knowledge about themselves into meaningful learning experiences.

This was also exemplified in the Grade 3 lesson, this time using learners' birthdays. The teacher brought learners to the chalkboard to write their names and their birthdays. The teacher then asked the class to

determine which of them was the oldest, and which one was the youngest. Learners generally found it difficult to answer such questions, largely because the cognitive effort involved was quite high.

A question such as "Who is the oldest?" makes great demands on the learner, largely because it calls for comparing the birthdays of four or more children and calculating the correct answer. The teacher is required to engage in a great deal of syntactic elaboration to mediate this question. As the learners' competence in English is quite weak, many learners do not understand the question. Noting that the learners are unable to respond to the question, the teacher invites one student who understands the question to explain it to the rest of the class in Sepedi, their mother tongue. A part of this interaction is captured in Transcript 6.

Transcript 6: Home language as a resource for EFAL learning

Original utterance	Non-verbal aspects and actions
1 T: Who understands my question?	
2 L: Yes	Some of the learners affirmatively respond.
3T: I want you to explain in your language to her what I'm asking … I am asking you to tell me …. we've got four birthdays and four names … correct? I want to know who was born first and who was born last … That means who is the oldest and who is the youngest? Now, they don't understand the question. Can you tell them in your language … in Sepedi … what I want? Stand here and tell.	The teacher points to the board where the names of four students along with their birthdays are written.
4 L: ……..(Not audible)	The learner stumbles, and the teacher passes the turn to another learner.
5 T: OK … Tell … in your language, tell them.	
6 L: ***Ba re o monyane ke mang? … Ke mang a belegweng pele, le wo a belegeng mafeleng ke mang?*** (The question is who is the youngest? Who's the one born first, and the one who followed last?)	A female learner stands up and interprets the question to the rest of the class in Sepedi
7 T: Did she say it correctly?	
8 Ls: Yes!	
9 T: You all understood her?	
10 L: Yes!	Learners respond.

This excerpt demonstrates how L1 can be a resource for learning and understanding in L2 lessons. It enhances classroom dynamics, and provides a sense of security to L1 learners. Through this teacher intervention, learners who are slightly ahead become agents in peer-mediation by assisting their peers to understand the English utterances of the teacher.

In contrast to the regular lessons, where chorus answers and repetitive reading-aloud dominate, the teacher of the intervention lessons demonstrated how teachers can use the resources that learners bring (such as the knowledge of their home language and their ability to write their names and birthdays) to bring about learning.

In Transcript 7, we see the teacher helping learners to understand a word in their text ("sorts") in a lesson on a visit to the library. The text contained the sentence "There are all sorts of books in the library".

Transcript 7: Negotiating the meaning of "sorts"

Original utterance	Non-verbal aspects and actions
79. T: Who can read it? Try! It doesn't matter if you don't get it right. It's OK. Just try!	
80. T: Who wants to try? Do you want to try? ... Come! Try! ... Allright, try reading it. Come! ... They ...	Teacher trying to encourage learners.
81. L: They... (inaudible)	
82. T: Yes, you're reading it very nicely. Read it loudly.	Teacher moves closer to learner to hear better.
83. L: They ...	
84. T: They ... they... What is this word after "They"? What is the word after "They"?	Teacher points to learner's page. One learner has a hand up, the majority are mumbling amongst each other.
85. Ls: ... were ...	
86. T: Yes! They were ... excited ... to see all the books. ... They were excited to see all the books.	Learners keep on trying to read at their own pace.
87. T: OK. Who is going to read the next line? ... Next one -- it begins there. ... This one. Who's going to read that? ... Will you read the sentence? ... From here ... Can you read?	Teacher points to the next sentence. The learners are not engaging much with the teacher.
88. T: OK. Anyone who can read that? ... There.... There ... yes.	2 Learners raise their hands.
89. L: ... all ... (inaudible) ...	Learners each try reading at own pace.
90. T: ... all ... What is the next word? There were ... there were all ...?	Learners each try reading at own pace.
91. Ls: There were all sorts of books.	Learner raises her hand and teacher points to her to read.
92. T: There were all sorts of books ... Okay, I'm going to write this word here.	Teacher writes 'sorts' on chalkboard.
93. T: What is this word?	
94. Ls: Sorts.	
95. T: Sorts. What is the meaning of "sorts"? ... What is the meaning of "sorts"? ... There were all sorts of books. ... There were all sorts of books. ... What does it mean? What is the meaning of "sorts"?	Teacher gestures to imply lots/many. Learners do not engage and keep their heads down.
96. T: OK. You go into a vegetable shop. Right.	
97. L: Yes.	
98. T: If you go into a vegetable shop, what do you find in a vegetable shop?	
99. Ls: Vegetables.	A learner raises his hand and the teacher walks over to him.
100. T: What…vegetables? What type of vegetables? Give me the name of one vegetable.	
101. L: Tomato.	More learners start to raise their hands.
102. T: Toma ... tomato. OK. ... Yes.	
103. L: inaudible	
104. T: Pineapple? Yes. Pineapple.	Teacher walks around selecting

Original utterance	Non-verbal aspects and actions
105. L: Apple. ... (inaudible other options)	learners to answer the question.
106. T: Apple. ... Banana. ... Pear. ... Yes, pear ... right. What other ... vegetables, and fruits? Huh?	
107. L: Fruit.	
108. T: Fruit. OK. ... Oranges ... yes. ... Spinach... Yes.	
109. L: Mango.	
110. T: Mango. OK. So, when you go ... When you go to a vegetable and fruit shop, you'll find all sorts of vegetables ... Understand the meaning of "sorts"?	
111. Ls: Yes.	
112. T: What's the meaning of "sorts"? Can you tell me?	Teacher waves her arms asking if anyone can answer the question.
113. T: Can somebody tell the meaning in Sepedi? ... All sorts of vegetables. ... Carrots, bananas, spinach, oranges, uh, pineapples, all ... all sorts. ... OK? ... So what is the meaning of "sorts"?	Teacher spreads arms open suggesting "many".
114. T: Do you know this word?	The teacher writes "kinds" on chalkboard.
115. T: ... all kinds.	
116. T: All kinds of vegetables. ... Do you know the word 'kinds'? ...	Teacher points to word on the board.
117. Ls: No.	
118. T: OK. It means: "many different things". OK. Like you have many different vegetables and fruits, you also have all sorts of books ... many kinds of books. OK.	Teacher spreads arms open suggesting many.
119. T: So, you can have books about games. ... You can have books about songs. ... You can have books about stories. ... You can have books about ... uhm ... sports – different kinds of sports like soccer, rugby. ... You can have books about the world – all the countries. OK.	
120. T: So, you can have many, many kinds or sorts of books. ... OK.	Teacher collects book and points out the next sentence. Some learners raise their hands. Other learners read at own pace.

From Line 93 onwards, the teacher begins a discussion with the learners on the word "sorts" and by using the example of a vegetable shop and many kinds of fruits and vegetables found there, tries to get learners to understand the meaning of the term "sorts". The teacher tries to make the concept accessible to the learners by exemplifying it in such a way that learners may easily relate with it. This kind of mediation is based on the teacher's ability to get learners to draw upon their existing knowledge frameworks to discern the possible meaning of the term.

5.2 The Gauteng component of the study

In parallel with the reporting on the Limpopo component in Section 5.1, the unique design features and data collected in Gauteng by the principal investigator, second co-investigator, senior partners, and post-

graduate students located in Gauteng, are described here. An overview is provided in the first sub-section (5.2.1) of the methodological components unique to the Gauteng data. Subsequent sub-sections are devoted to reporting the findings.

5.2.1 Methodological features

Research design in the Gauteng strand of the project

Because the exploratory work and first classroom observations got underway first in Gauteng, two differences in approach are evident. First, more research sites and classrooms were covered in Gauteng compared to Limpopo. Second, observations only covered regular lessons taught by the schools' own teachers, and not intervention lessons taught by research partners and university academics on the project. The latter outcome does not negate the strong arguments for intervention research to develop solutions that will improve education quality through classroom practice, but reflects the developmental nature of the design, methodology and conceptual framing of the study, which was characterised deliberately by a strong exploratory first phase.

A third difference underpins the research work in Gauteng. It relates to the additional presence of a formal provincial literacy development strategy over and above the national curriculum and assessment context, which changed for both provinces (Limpopo and Gauteng) from NCS to CAPS during the early stages of the study. The observation, recording, analysis and interpretation of the regular lessons taught by school teachers in Gauteng therefore have to be seen against the backdrop portrayed above.

In the following sections, more detail is provided about the research design, site and subjects of the research, as well as the data-collection procedures and the analytical frameworks used to make sense of the data, although in the latter instance some consensus had already been agreed on at the time by which analysis of the empirical data commenced. Repetition will therefore be avoided by not reporting as fully on that again.

The Gauteng component also used a qualitative case-study approach to satisfy the requirement of in-depth understanding of real-life classroom events. Teachers were provided the opportunity to articulate their views and reflect on their complex classroom experiences. This was accomplished by having semi-structured interviews and debriefing sessions with them, also on the basis of the video footage of their own lessons that they were provided with.

Research sites

Essentially, a fortuitous and/or purposive sampling strategy was followed in Gauteng. Schools were approached for participation through existing personal contacts and word of mouth referrals by other scholars who occasionally contributed to the project discussions. In the process, an eye was kept on representation across grade level, the language subject which was taught and observed, the broader geographic area, and the socio-economic context of the community in which a school was located. Important requirements that were set in relation to inclusion were to observe African home-language lessons and EFAL lessons across all the FP grades (1 to 3). In additional, township schools in and around the two big cities of Pretoria and Johannesburg were favoured as they would represent typical classroom and socio-economic conditions that would reflect their need for additional support and urgent research solutions on the basis of disadvantage. Schools were approached and recruited essentially for as long as the team's capacity and timelines allowed taking on any next additional site. Dr Michel Lafon was formally

tasked with and instrumental in identifying, making contact with and securing participation agreements with all the Gauteng school research sites.

Two schools were located in the Mamelodi township to the north-east of Pretoria, and one in the Soweto township to the south-west of Johannesburg. These two areas are very typical large-city township areas. Their inhabitants often commute anything from 10 up to 50 kilometres to their places of work in the suburban homesteads, or at business, manufacturing or office sites or otherwise in the centre of the city, its suburbs or outskirts. Unemployment is above the average, resulting in many of the learners' parents, especially the females, staying closer to or at home, at best in the local informal economy. Both townships are exceptionally large with reasonably well-defined and dynamic internal economies, infrastructure and sociologies, albeit less formal. The population of these areas are predominantly African, although single language groups or ethnicities do not necessarily dominate.

Both schools in the Mamelodi township were very close to the informal settlement outskirts of that township. This determined the feeder area from which their learners came. Poverty levels were quite high. However, one of the two schools benefited from a major recent industry aid agreement and had brand-new and ample facilities. The second school was much older and worn down. Children from both schools were from homes where the home languages were predominantly Sepedi (60%) and isiZulu (25%), and to some extent isiXhosa (10%), with a splattering of isiNdebele. Mixed-language households, or parents speaking different African languages, were not uncommon. A very small portion of parents was from Zimbabwean and Nigerian origin. Both schools were Quintile 1 schools and had total learner numbers of between 1 800 and 1 900.

The community around the school in Soweto predominantly comprised isiZulu-speaking parents (in excess of 90%). Small percentages of parents were indicated as Sesotho- and isiXhosa speaking, while as many as 8% were moving towards speaking English often at home. Although also poor, conditions were not as dismal as elsewhere, and living conditions, infrastructure and the related sociology were intact to a reasonable degree. The proximity of the mining industry to its south-west can also be noted. This school was smaller, with a learner total of around 900. It was a Quintile 3 school. As with the two schools in Mamelodi, ,it was also a "no-fee" paying school, and running a feeding scheme funded by the Departments of Basic Education and Social Development.

Additional features common to all three schools were that they had buildings of brick and mortar, including an office complex, and good to excellent access to library facilities. As already noted, the facilities of the one school in Mamelodi could be considered state of the art, in most senses. The school in Soweto had only the most basic separate rooms serving as offices for the principal and administrator, and staff room. All schools were properly fenced in and exercised access control. The schools all had enough classroom space, although the numbers of learners in a class (class sizes) were typically in the range of 45 to 50, with only the industry-supported school in Mamelodi able to bring that down to 35. All three schools admitted learners from Grade R to 7. None of the FP teachers, who were all female, had personal or full-time access to computer equipment in support of their teaching. All teachers teach all the required learning areas to their classes, with each class being allocated one teacher.

Research subjects

The research participants were the teachers and learners of the respective Grade 1 to Grade 3 classes in the three schools. Overall, the study involved five teachers across the three schools drawn from two townships from two metropolitan cities in Gauteng. The data were based on classroom observations and

teacher interviews. The observational data were drawn from regular lessons only. These were routine lessons taught by the regular teachers recorded within the naturalistic setting of their own classrooms.

Data-collection procedures

Lessons were video-recorded, with a full soundtrack, to enable multiple viewing of classroom events and the identification and selection of sections of the most direct interest to the study. Brief field notes were also taken when researchers realised that the footage would miss some of the classroom interaction or dynamics. An important additional purpose that the recordings served was to give members of the research team who had not experienced any specific lesson delivery first-hand, an almost ideal opportunity afterwards for doing so. This, in turn, gave substance to one of the main objectives of the study, namely enabling all the researchers forming part of the collaborative team to view the data and interpret that from the diverging perspectives held by them. This enriched the analytical process. This also explains why the video data featured centrally in the data collection and analysis. The use of two camera positions, besides the mere fact of making video recordings, ensured that the researchers had the appropriate tool for investigating how teaching and learning (education) are co-constructed by teacher and learners during lesson activity. Researchers could also re-check and confirm anything that may have remained ambiguous, see if knowledge gaps could be filled, or tease out further detail by slowed-down viewing.

Interviews were used as another rich research tool to allow the team to collect complex, subjective data from the research participants. A two-stage process was used. In the Gauteng component, semi-structured interviews were used at the outset to contextualise, select and plan the intended classroom observations better. At this stage, the information collected from principals, phase organisers and teachers mostly covered the demographic and contextual information related to language prevalence, proficiency and use in the school, among the participating staff and learners, and in the community surrounding the school.

After the video recordings were transcribed and analysed to a very preliminary extent, summaries of the main observations were made and shared with teachers, with copies of the recordings, on an individual basis. The purpose was to put a reality check in place in relation to researchers' early interpretations of the observations, to clarify any ambiguities or knowledge gaps, and to provide teachers an opportunity to enhance the interpretation of what transpired during an observed lesson by reflecting on it again. This step of the process was accompanied by a structured interview schedule, almost in the form of a formal questionnaire, although it did not entail self-reporting. The interview schedule was then used to interrogate further and to record teachers' reflections on their conceptualisations of literacy, to confirm their formal qualifications, experience and teaching loads, to record the availability of literacy resources at the school, and to learn more about the implementation of language policy at the school. These contents were the same as those covered during the data collection with teachers in the Limpopo component of the study. The structured interview questions are attached as Annexure 2. A primary objective of this dialogue was to allow the researcher to probe what teachers consider essential to the nature and aims of literacy teaching and learning.

The semi-structured nature of the interview and many of its open-ended questions offered opportunities to follow-up on specific responses by teachers to such questions. It also allowed teachers another opportunity, as a benefit from being given the time and space, to raise any hitherto anticipated or planned topics or issues, which may very often be burning issues for them and thus related closely to the topic of the study. Such teacher responses would provide interesting and strong evidence linking their current classroom practice with their theoretical and conceptual understandings of literacy learning and teaching.

Finally, selected materials, mainly copies of lesson plans, textbooks or learner workbooks, were also collected when it became evident, while making the video recordings, that such additional materials would be valuable in illuminating specific matters further. These materials were not specified in advance, though.

Lessons observed

Five regular language lessons in three different schools from two townships/cities were observed and recorded. The observations occurred in the period from November 2011 to August 2012. Three lessons were in Grade 3 classrooms while one each was in a Grade 1 and Grade 2 classroom. Two were lessons in isiZulu, one in Sepedi, and two in English as First Additional Language.

The classrooms were in all cases furnished with appropriate, largely conventional, language posters on the walls. These displayed both handwritten and commercially produced materials. They were mostly appropriate to the language of instruction at the school and in the classroom. Most of them were predominantly about parts of the body, shapes, colours, names, months, days of the week and seasons of the year. Popular in some classes were vocabulary charts depicting complex scenes. Sometimes flash cards with letter blends were also displayed. At the back or side of the classrooms, copies of learner workbooks, textbooks and readers were often stacked for storage. These were the ones provided by the Department. Learners seemingly were not always allowed to take them home. Some materials for reading for pleasure were in evidence, but not in vast quantities.

Details of the observed lessons are provided in Table 5.4.

Table 5.4: Breakdown of lessons observed in Gauteng (sample)

Date	School/Grade	Subject	Nr of learners	Teacher	Duration (min:sec)
		Regular lessons			
14 Nov 2011	A/1	Sepedi HL	50	A	33:04
14 Nov 2011	A/3	English FAL	51	B	49:21
23 Apr 2012	B/2	isiZulu HL	36	C	60:22
6 Aug 2012	C/3	English FAL	44	D	50:06
24 Aug 2012	C/3	isiZulu HL	45	E	41:48

Data analysis procedures

As described in Chapters 3 and 4, and as reported already in Section 5.1.1 for the Limpopo component of the study, a minimum degree of commonality in data-analysis approach was pursued across the study's provincial parts. As in Limpopo, the data from Gauteng got analysed in order to address the main research questions, namely what the language and literacy practices of teachers in the FP were and what conceptions of literacy underpinned these practices. Through qualitative data analysis, the team was able to select, categorise, compare, synthesise and interpret all its data systematically in order to provide understandings of classroom events. The qualitative paradigm enabled the team to transform large amounts of data methodologically into clear and concise statements about pedagogical patterns and routines that underpin the observed classroom practices.

All the data were transcribed, but not all of it were analysed because of the large number and duration of lessons recorded. As a result, the video data were reviewed deliberately with a view to the selection of specific literacy events (episodes involving interaction around texts) for deeper analysis. The transcriptions selected for further analysis were also provided with a column summarising in parallel the non-verbal behaviour of teachers and learners. These summaries reflect how materials were used during lessons, and

any movements and actions that occurred. In the case of the one Sepedi and two isiZulu lessons, English translations were included in the transcripts. It again has to be acknowledged that the method and format selected for transcriptions already reflect some theory-based decisions of the researchers. Such choices determine, for instance, the type of analysis that can be undertaken, and what is more, that the researchers already had in mind when selecting an approach. The transcripts were keyed for both verbal and non-verbal communication, for instance, but not for metered time units. Interaction management (turn-taking) and conceptual and cognitive processes and levels would be visible in this way as indicative of teachers' choices, emphases and approaches in relation to language teaching and learning.

The selection and formulation of questions during interviews determined, along with researchers' subsequent use of interpretive or content analysis techniques, how participants' attitudes, perceptions, understanding, knowledge, values, feelings and experiences would be brought to bear on teachers' classroom practices. Such content analysis focused not only on any common (or divergent) themes that emerged from teachers' responses, but was also directed partly by the three-part analysis framework that the whole team agreed on in advance.

5.2.2 Teacher profiles

Before presenting the findings, a brief account of the teachers' qualifications and experience is provided. That would assist later in exploring how their current classroom practices and beliefs about language and literacy teaching and learning may have been shaped by these factors. Table xxx summarises this information.

Table 5.5: Teacher profiles (Gauteng)

Participant-teachers	Teaching experience	Mother tongue	Grade taught	Allocated subject	Qualification of teacher	Period spent teaching at this school	Subject trained for at university
Teacher A	15 years	Sepedi	Gr 1	All subjects for grade	Dip.Ed (3 yrs)	15 years	English, Afrikaans, Bibl Stud, History
Teacher B	18 years	Setswana	Gr 3	Sepedi Gr 1&2; EFAL Gr 3	Dip.Ed (3 yrs)	12 years	Sch Mgmt, PT, English, Sepedi
Teacher C	8 years	isiZulu	Gr 2	All subjects for grade	Dip.Ed (3 yrs)	4 years	FP (isiZulu, Eng, Maths)
Teacher D	10 years (6 IP; 4 FP)	isiZulu & isiXhosa	Gr 3	All subjects for grade	Snr Prim Teaching Dipl (busy with ACE)	4 years	English, History, IsiZulu, Geography
Teacher E	14 years	isiZulu	Gr 3	All subjects for grade	Jnr Teaching Dipl (3 yrs); Dip High Ed (2 yrs)	7 years	FP (isiZulu, Eng, Maths)

All the teachers whose information is reflected in Table 5.5 are female. They display a range of mother tongues and relatively long experience ranging mostly from 10 to 15 years overall and 5 to 15 years at their present schools. There is a mismatch of training and current subject allocation for the first two teachers in the table. They are from the same school and the situation seems to be attributable to seniority in relation to an HoD appointment of one and the mother tongue of the other teacher. The task to teach all the

subjects across the grade when a teacher is appointed in the FP has to be acknowledged. Only two teachers had training specific to teaching in the FP.

All the teachers at most achieved a teaching diploma. The exception is one teacher with a second higher-education diploma. None of the teachers had formal training at university level, although changes to the teacher training colleges landscape a number of years back meant that the former training institutions of two of them (A and C) got incorporated into current programmes at universities.

The analysis of the classroom data are presented next. As before, the focus is on the teachers' pedagogic practices and how they enact the curriculum.

5.2.3 Analysis of the classroom lessons

In its discussions, the group identified three specific pieces of video footage for further analysis. These snippets or clips were selected to represent moments in the lesson during which teacher and learner engagement with text, specifically through reading or writing, was at its deepest. In that sense they had to serve as moments of literacy development. These snippets came from video footage made of a single English language lesson of about 50 minutes in duration. This material – video footage and its transcription – is used as basis for the discussions that follow about the interactional patterns occurring in the lesson, and the participants' roles in the learning process, especially in relation to the cognitive and conceptual challenges, tasks and achievements at stake.

Analysis of an English First Additional Language Grade 3 lesson (Mamelodi township school)

This lesson covered the following contents, broadly speaking: a warm-up song with movement; recapping pages 2-5 and covering pages 6-7 of the text learners were reading for the week by responding to teacher questions about the pictures and relating those to their own context; the teacher sticking 10 new vocabulary words on the board in the process; learners reading them afterwards off the board and discussing them some more; reading pages 6-7 in various repetitions (silent, with teacher, alone, sentence by sentence, all in one); while organising for "dictation" (spelling test), having three struggling learners get some more practice in reading as led by competent learners; and doing the test (10 words). A plausible assumption can be that the lesson was about reading teaching to enhance learners' fluency and proficiency. It included comprehension, in particular by introducing new vocabulary through discussion, which featured strongly.

The physical material comprised a story about Mr Joseph having won the lottery. The material was self-produced as sketches in a line-drawing style accompanied by written (typed) text covering what happens in each picture. Each learner had a personal copy. There were eight A4-pages with sketches on the top half of each page and the text on the bottom half. This was compiled into a booklet (flip-file style insertion of photocopied pages in cellophane sleeves) so that an open double page was covered in sequence over each of four days in a single week. This allowed for quick revision and catching up with the storyline from the previous day/s before the teacher engaged the learners in the section of the day.

The lesson was rich in the use of a variety of didactical techniques and approaches. The potential number of narrowly-defined literacy events (engagement with written text) was also abundant, albeit spread over the whole lesson and interspersed with various oral engagements between the teacher and learners. For this reason, the full transcription is included as Annexure 4. However, the detailed analysis and discussion that follow below are based on the three specific selections. They are indicated and cited in the text each time. The discussion of interactions and cognitive and conceptual engagement with the learning content

appears each time with every selection. The selective analysis appearing in this section therefore implies that much more additional analysis could have been done by the team, had the scope of the study allowed for it. The team or other scholars can return to such analysis after the formal life of the project, as another option. Such analysis could use a quantitative approach, for instance, to deal with the number of questions that the teacher asked over the duration of the whole lesson, how many of them were responded to individually or as class from the side of learners, either "correctly" or "incorrectly", and how often the teacher gave feedback to learners about their responses, including the kind of comments, corrections or praise that the teacher used.

Because the transcription for this lesson was the first that became available, it already served before several full working meetings of the whole team while still engaging in refinement of its analysis framework on the basis of preliminary analysis of this lesson-observation material. As a result, some contributions from the team members from Limpopo and the Gauteng group will be acknowledged separately. Many of these working meetings also included "external" contributors, as already acknowledged elsewhere, who gave very useful interpretations from their various unique perspectives and engagement with teaching, classroom and research practice[37]. Some reflection is made at the end, after reporting the selected findings concerning this Grade 3 EFAL class observation, about how preliminary analysis and refinement of the analysis approach interacted.

An effort was made to foreground how a number of dynamics, possibly based on a range of conceptual frameworks and paradigmatic positions, played themselves out. These would refer to matters such as the following: the occurrence of "safe-talk" and extended chanting or ritualised repetition as reading; embedded phonics, or the automation of phoneme-grapheme decoding of letter-sound linkages; the occurrence of and opportunity for learners to engage with previously unseen text; individual reading opportunity, and the role of all the foregoing in cognition and comprehension. The team benefited from the retrieval of a small collection of assessment responses by learners from the assessment task that the teacher gave learners at the end of the lesson. This is reported on towards the end of this subsection.

A final note that has to be made is that this observation occurred just before a formal curriculum change. The official curriculum changed from 2011 to 2102. CAPS applied in Gauteng from after this observation. Teaching and lesson plans were at the time of the observation based on the GPLS, which in some sense existed parallel to the NCS, of which it was a further operationalisation. This situation differs in Limpopo. Teachers also didn't have training in English in the GPLS, and they were able to choose their own material. A Sepedi Grade 1 class observed on the same day was definitely using the GPLS manuals and materials. Although CAPS largely served as a refinement of previous NCS contents, and would not spell overly substantive implications, this curriculum change has to be factored in. For one, from 2012 even more specification of and control over the exact lesson plans that had to be followed on a given day, up to indications for the duration of the separate portion of such a timetabled lesson, were provided.

Annexure 5 contains a contextualisation of the classroom, school, community and departmental context surrounding the observed lesson, as it were, and providing valuable further information for understanding some of the classroom dynamics reflected in the transcription of the video footage.

[37] The record of discussions, analysis, preliminary findings and first insights compiled by Ramani and Joseph from all the inputs made at the joint project-team working session of 18 May 2012 was very valuable when producing the report on this lesson observation. Large sections of it are reflected unchanged. The participants at the session were Prof Vic Webb, Dr Cas Prinsloo, Dr Michel Lafon, Ms Shawn Rogers, Ms Michelle van der Heever, Ms Natalie Schmidt, Mr Abram Mashatole, Mr Mafeye (Moses) Morapedi, Mr Tseke Mphahlele, Ms Sibongile Bopape, Prof Esther Ramani, Prof Michael Joseph, Ms Pat Murray and Mr Andrew Murray.

Observations and findings for three individual selections are provided first before providing a short integrated summary of conclusions at the end across all three video clips.

Selection 1 - Vocabulary

In the first selection, reflected in Transcript 8, the teacher directs learners back to word-cards (self-produced; enlarged print on A5- to A4-sized paper; some words with and others without initial capital letter) on the chalkboard. She pasted them there earlier in the lesson as part of an exercise deriving "vocabulary" from the two new pages of reading text they have been working through. Learners are expected to say the word after the teacher, as she points to each word in succession with a ruler. Once having gone through all the words, the teacher solicits a discussion on each word through asking questions that were often related to learners' environment and life experience.

Transcript 8 Selection 1: Revision of vocabulary from the chalkboard (18:29 – 19:02)

Activity / action	Transcription
The teacher directs them back to the chalk board to read the new vocabulary. This, the previous and next parts formed a very interactive dynamic filled with opportunities for learners to link the lesson to their own lives, reality and environment. The teacher uses a ruler to point at all the words and ask the learners to repeat them as they go along. She goes through each word and asks the learners to give her practical examples of each word. (After pointing to the word, teacher folds her arms when asking each question.) The learners become more interactive, interested in the class and raise their hands to answer the questions and give their account. The teacher also repeats what some of the learners have said, to ensure that the children have gotten the point and understood the word. The learners are then asked to repeat the next word before	Teacher: "Now let's go back and read our words on the chalkboard. I don't have a ruler. S, can you borrow me a ruler? Borrow me a ruler. Thanks. Now, let's look on our chalkboard and read our vocabulary. Radio." Learners (whole class): "Radio". Teacher: "Announcement". Learners (whole class): "Announcement". Teacher: "Winning". Learners (whole class): "Winning". Teacher: "Street". Learners (whole class): "Street". Teacher: "Corner". Learners (whole class): "Corner". Teacher: "Shebeen". Learners (whole class): "Shebeen". Teacher: "Church". Learners (whole class): "Church". Teacher: "Morning". Learners (whole class): "Morning". Teacher: "Listen". Learners (whole class): "Listen". Teacher: "Telling". Learners (whole class): "Telling". Teacher: "Today". Learners (whole class): "Today". Teacher: "Who can tell me, what is a radio? What do we do with a radio? Let's hear". Learner: "We ... we ... we ... we ... we listen to the radio, and we listen to the soccer on the radio". Teacher: "We listen to news, soccer, music, everything on the radio. Radio". Learners: "Radio". Teacher: "Announcement" What is an announcement? What is an announcement? When I'm standing here and giving you an announcement ... What is an announcement?". Learner/s: "Message". Teacher: "It's taking the message back to our ... nuh ... the next person. If I send you, ... I give you an announcement, you take it to the next person to deliver the message." Winning. Learners (whole class): "Winning". Teacher: "Winning". Learner: "Winning". Teacher: "When I say winning, what is happening there?". Learner: "I'm winning the Lotto." Teacher: "You can play the Lotto and you win the Lotto. Can we only play the Lotto ... and

Activity / action	Transcription
further explanation. This occurs for all the words, the teacher also walks up and down the aisle. She gets the class more involved after saying "lets hear from this side, People are sleeping here" Learners discuss amongst themselves some of their ideas, before raising their hands (evident with the 2 girls in the front of the 3rd row.) Borrow / lend. When talking of corners, the children are asked if there are corners in the class room, a number of learners point to the back right hand corner to where the walls meet, to indicate that they understand what is meant by a corner. The class is asked to clap in unison for thee learners.	win?" Learners: "No." Teacher: "What can you play?." Learner: "Powerball." Teacher: "You can play Powerball and win." Learner: "Jackpot." Teacher: "We can choose Jackpot and win. Let's hear this side. People are sleeping here!" Learner: "Soccer(?)." Teacher: "We can play soccer with our friends and win the ... the ... the game. S. We can play cricket with our friends and win the game. Now ... street." Learners (whole class): "Street." Teacher: "Street." Learners (whole class: "Street." Teacher: "What is a street? None of us know what is a street! I just want you to tell me what is the street. Street. When you talk about the street, you talk about what? Let's hear." Learner: "Corner." Teacher: "Not corner ... somebody can tell. Yeah?" Learner: "Road." Teacher: "A re, it's a road. Yes. It's a road. Each and every road it's got their street. And each and every street it's got a what? It's got a ...? Name." Learners: "Name." (together with the teacher) Teacher: "Corner." Learners: "Corner." Teacher: "Where do we get corners? When we talk about the corner ..." Learner: "Street." Teacher: "On the street. And then in the class ... do we have corners in the class?" Learners (whole class): "Yes." Teacher: "Where are the corners? Can one of you show me where is a corner? Thanks, T. Clap hands for T there." (Clapping) "Shebeens." Learners: "Shebeens." Teacher: "Shebeens." Learner: "Shebeens."

- **Cognitive comprehension effort required of learners**

Working from the video footage, the verbatim transcription of the verbal communication during the lesson (right-hand column), and the researchers' notes reflecting the accompanying non-verbal action (left-hand column), a number of interpretations are offered by the research team members. These were derived not only from the working meetings, but also as part of documenting this section[38]. In terms of the cognitive effort that the class work required from learners, what follows seems to have applied.

A key question is what the learners thought the lesson was about in the absence of the teacher setting clear lesson goals[39] in advance. The result was the diffuse treatment of (i.e., lack of strong interconnection between) comprehension, vocabulary, spelling, grammar, reading skill (speed and accuracy), life skills and education. The question could be asked if the lesson at all was about comprehension, including understanding text when new words occur in a passage. What were learners' perceptions in this regard? There was no clear determination from the side of the teacher before the lesson started as to whether or

[38] Mainly by Prinsloo and Rogers.

[39] The assumed lesson content was broken up into five major types of activity: (a) teacher reading aloud and learners doing silent listening and pointing to the text; (b) word-sound correlation through imitation; (c) teacher eliciting meaning of words; (d) learners using understanding of words by using them in sentences of their own; (e) dictation (spelling) test (as summarised during the Limpopo working sessions that preceded the final joint working session). Also see Annexure 5 for a few additional notes on the lesson objectives based on discussing its lesson plan with the teacher.

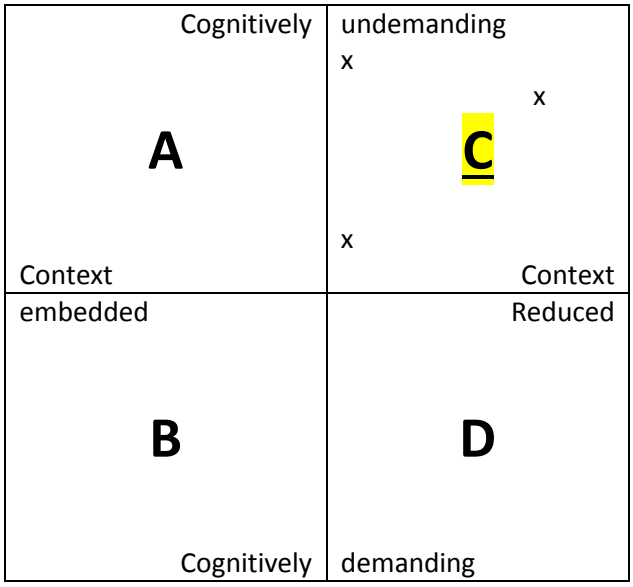
not learners knew these words already, or, at least, which learners knew which words. A good suggestion would have been for the learners to choose the words they did not understand or find interesting or relevant.[40] Another option may have been that the purpose merely was learning new vocabulary. A third option, quite plausible at that, was that the lesson largely steered towards the spelling test (called "dictation") at the end. Not knowing that the teacher was going to assess spelling at the end, the learners may have thought that the teacher's main objective was to determine whether they understood the meaning of the words covered in the lesson, while they may have expected her then to have spent more time on making the spelling accessible to them. However, the teacher didn't engage with the words in this way, for instance by drawing learners' attention to the breakdown of the words, the specifics of their spelling, and how there may be differences in new words in English (morphological structure). It is granted that a lesson may (even should) have multiple purposes, but from the point of the learners, the purpose of using the text or the vocabulary was not (made) clear to them. Having alluded to multiple objectives for a lesson, it can also be asked if the teacher did not miss an opportunity to engage in a fourth task. That would be discussing moral issues, or higher-order terms, such as gambling. In relation to the level of cognitive effort required from learners, there is a sense that they were not given a structured opportunity to really learn new vocabulary, by discussing the words further and embedding them in higher-order concepts. As such, the lesson did not convey such new concepts (CALP), although elsewhere in an isolated way the teacher did associate coming to school with becoming a better person.

The cognitive engagement of learners is evaluated as comprising low-level cognition. It assumes only the most general sound-symbol relationship, and involves some general elicitation of meaning. Symptomatic of this basis is the predominant focus on (teacher selection of) high-frequency words. While looking at the meanings of words, the pace is quite fast and suggests that the children knew the vocabulary. They do not concentrate on defining (or are not required to define) the meaning of words conceptually, but use words in sentences. This is a much easier task than giving conceptual definitions, and operates at most at the level of implied functional definition (e.g., making a sentence in which the word features, rather than giving a formal definition of its meaning). As a result, there was no occasion for expanding word definitions beyond functional definitions into conceptual definitions. Such an approach reduces the opportunity for engaging in more and deeper reasoning and discussion. The teacher also does not create or use opportunities for probing further to determine whether or not learners were able to explain initial sentences or understanding further. It could not be detected whether or not the teacher attempted to determine if learners had a representation of any given concept in their mind (i.e., already knew the Sepedi, for instance). Teachers were not supposed to make use of code-switching, and hence in any confirmation of learning progress, had to rely on simple definitions. They therefore cannot capitalise on the use of multiple resources available in classrooms during complex language encounters in multilingual classrooms (see Evans and Cleghorn, 2102).

To illustrate and further analyse the level of cognitive effort required of or engaged in by learners, a student[41] from the Limpopo-group, using Cummins' four quadrants, as depicted in Figure 3.4, analysed the classroom interactions. He rated all interaction as cognitively undemanding (Quadrant C in the schematic depiction that follows, where linguistic effort is also considered low, being context-reduced). His analysis concentrated on the cognitive effort of the learners (the Y-axis) on doing revision of vocabulary. An attempt was made to identify the type of effort made by the learners. Were they challenged? The learners were not challenged cognitively because the type of effort made by them was a linguistic effort requiring low cognition. Therefore, the effort here in Selection 1, but also Selections 2 and 3 later, falls in Quadrant C.

[40] Cf. Allwright (1988, 1993) on the use of such samples and handouts.
[41] Morapedi.

(Repetition; recall)



(Conceptual engagement)

Below is his analysis of where learners' efforts were situated for three types of classroom action:

> *Repetition episode*: Entails a linguistic effort; no cognition is required; Quadrant C – at the top of the Y axis near cognitively undemanding.
>
> *Meaning/functions of words episode:* Entails a linguistic effort; low cognition required; Quadrant C – down the Y axis towards the X axis.
>
> *Finding-out if learners can use the words in their own examples episode:* Entails a linguistic effort; low cognition required; Quadrant C – below repetition on the Y axis and more towards context-reduced.

It was therefore not possible to attribute cognitive gains to learners[42], mainly because the class-based assessment tasks would not show such clearly. Cognitive effort at the highest level ("Level-3 effort", that is, responses requiring learners' opinion on the basis of evaluation, were not required of learners by the teacher within this lesson. Isolated evidence was found at one point of "Level-2" effort (some/slightly implicit reasoning; as revealed by one boy in constructing a double-clause sentence), with the second part (about "soccer") a deeper explanation of the first (about "radio"), while the bulk of the challenge to learners reflected "Level-1" effort (mere recall of information). Therefore, it was not possible to conclude from what we saw that learners in fact gained any new knowledge.

Teaching practice in this regard is not considered to be reflective or useful because the teacher could not be seen to implement deliberate strategies to improve any CALP skills. This may explain the low level of cognitive effort that learners in general were challenged to engage in. Strategies that could have been pursued were giving learners the task to classify words as nouns, adjectives, etc.; to engage with words beyond a functional definition or sentence for further development of English proficiency; to draw learners' attention to the breakdown of the words, or to the specifics of spelling conventions, and how there may be differences in new words in English (morphological structure); and to avoid chorusing. Words in isolation fall at the level of BICS; with chorusing, no individualised learner participation or engagement occurs. The

[42] The contribution by Mashatole further down in the section on new concept attainment to some degree covers the cognitive challenge posed to learners, but is for brevity not repeated here.

chorusing doesn't allow for further engagement with the words/ing (words and their meanings). No deliberate progression therefore existed from BICS to CALP or efforts to articulate between the two.

A similarity noted early on across Grade 3 lesson observations was teachers' intent to cover the lesson plan at all cost. This resulted in them being happy to follow a recipe slavishly. They followed the work plan mechanistically without spotting and using opportunities to move away from this structure to consider the larger scheme of things. Other information provided by the teacher indicates that learners were only taught English for a second year at this point, only for an hour per day. They were not able (allowed) to do grammar and the Department did not accept code-switching. The teacher recalled having seen research showing that learners fixate during code-switching on highly selective isolated knowledge contents. Teachers seemed unable to master English grammar if they had not mastered grammar at least at the same level in Sepedi.

- **Terms and management of interaction:**

A strong or dominant interaction pattern or structure became evident. It can be indicated as I-R-(F). The teacher predominantly asks questions which the learners are expected to respond to, often by means of rapid-fire single-word or partial-sentence responses. However, the question remains as to how meaningful such interaction is. Is it in service of learning? After that, feedback is either absent or implicit, as elaborated on further below.

An interesting example occurred in the form of a single interaction in which different learners were involved in reaching a correct response (definition). Where this occurs, instead of challenging the learner to explore the different definitions and schemata / knowledge (cohesion), which tends to reduce learners to silence and chorusing (with safe-talk the interaction outcome for teachers – see the insert immediately below on this topic[43]), the result is that interaction contributes positively to the outcomes in relation to the two other important sub-themes in our analysis scheme, being the improvement of cognition and conceptualisation.

Insert on "safe-talk"

One of the Limpopo working sessions aimed at reviewing the notion of "safe-talk" (Hornberger & Chick, 2001) and evaluating its current relevance for South Africa. Similarities were found between the Gauteng observation data and those presented by Hornberger and Chick. All three situations – Peru, South Africa in 2001, and South Africa in 2012 – are characterised by safe-talk, i.e., the absence of cognitive effort by students. This kind of teaching is therefore not confined to South Africa but appears to be more universal than we thought.

Safe-talk occurs within interactive sequences that follow the classic I-R-F pattern of classroom interaction observed to be widely practiced in schools all over the world (see Flanders, 1962; Sinclair & Coulthard, 1975). The initiation (I) by the teacher is an instruction to imitate or else a factual question. The response (R) is usually with the whole class chorusing, or else giving answers from their everyday knowledge. The feedback (F) is sometimes explicitly given in the Gauteng data, but more often implied, by the teacher asking a new question. In only one or two cases did the teacher reject a student's answer and correct the student. This rare occurrence of explicit negative feedback (against a backdrop of acceptance through implied feedback) supports the characterisation of the Gauteng data as safe-talk.

Despite the overall presence of safe-talk, we could find some instances of cognitive challenge, as in the question on what is a radio. However we did not look at the entire transcript, but only a small part of it, in

[43] Compiled by the Limpopo team after their team meeting on 10 May 2012.

order to generate hypotheses to examine the whole. We concluded that the microscopic presence of the "what" cognitive question that provoked students to come up with extended discourse showed "teacher innovation" occurring even if it was not part of the teacher's plan/routine. We would look for more of these innovations, as using these instances in contrast to the non-cognitive safe-talk (both coming from the same teacher, same classroom) in a training or ethnographic research context or even action-research intervention, would represent the kind of evolutionary approach that Dick Allwright (1993) once referred to. Such an approach to training or research would be more acceptable to teachers as they are confronted by differing strategies of teaching from their own classrooms. Once we tap their views based on their own data – which may be in the form of video, audio or transcripts – we can offer theoretical positions from the research literature that can help them see the particular from a more general position. The acquisition of theoretical learning (e.g., Hedegaard, 1990) by teachers, we predict, would enable them to recover anecdotal experiences of their own teaching.

Though we see similarities between the Peruvian and South African contexts, we think that our micro analysis based on the framework we have been developing (interactive patterns, cognitive efforts, concept development) already reveals elements of non-safe-talk. In other words, not all the interaction is based on chorusing. We would then need to examine the Peruvian and earlier South African data more closely. But, more generally, we need to examine any secondary data from the position of our framework.

Finally, we predict, differently from Hornberger and Chick, that safe-talk is not primarily caused by students having to learn in a foreign language (i.e., English), but from causes not to do with language. Some of these other causes, we speculated, could be:

i) the teacher's loyalty to her own school experiences as a learner, i.e., reproducing the pedagogy of her school days; and
ii) the safety of a behaviourist pedagogy of imitation that teachers would use in the mother-tongue medium classroom as well as in an English-language classroom.

We anticipate thus that Sepedi-medium instruction used in content classes in the primary school will show the same safe-talk. If so, it would refute the explanation of Hornberger and Chick. If our prediction is confirmed, it would show that the use of bilingual education in the primary school would resemble the flat-wheel cycle of Cummins cycle metaphor.

Keeping the above prediction in mind we decided to choose a classroom in Limpopo that is a content class; a second classroom that is an English language class in Grade 3, and a content class (using Sepedi) also in Grade 3. These three types of classes would enable us to compare the English-as-subject data with the Gauteng data; and to challenge the claims of Hornberger and Chick that safe-talk is an outcome of English medium of instruction for African and Peruvian learners. (See reporting based on the Limpopo sample in Section 5.1, where, after having conducted the anticipated investigations, these expectations were confirmed.)

In summary, for this classroom observation:

- The teacher uses I-R-F and I-R-implicit F. The predominance of I-R over I-R-F shows a tendency towards safe-talk. One I-R-F pattern is deviant. Here the teacher's feedback (F) is in the form of a question to a boy's wrong answer (the date 14th). The question casts doubt upon the learner's answer (and so is a form of rejection), but is also an invitation for the right answer (thus an initiating move or I) to which the rest of the class respond (R). This collective R is a feedback (F) to the learner. In another instance, when a learner gives a wrong answer ("corner") the teacher rejects it. The teacher could have used a question. So in relation to the "corner" example, the "date" example is innovative.
- There is no instance of a learner making an initiating move. Learner initiations would be a radical departure from the I-R-F pattern in this classroom. (See group work of Barnes (1969, 1976) for learner initiation moves.)
- There is hardly any mix of right- and wrong-answer responses, suggesting the classroom talk is

safe-talk.

- The feedback often shows the teacher answering her own questions, i.e., I and R done by the teacher, depriving learners of the chance to talk.
- There is very little wait-time before learners can answer. The teacher repeats her instructions as a result.
- The feedback on individual written responses (as in the dictation / test) lies in a summative direction and not formative.

Further hunches at the stage of preliminary analysis in the study included:

- Prevalent routines: Imitation + elicitation for word meaning. Reliance on I-R with implicit F. Samples (i.e., target-language exposure) and management in tandem. Low-level cognition, safe-talk (simultaneous non-overlapping turns; teacher-induced pretend reading).
- Deviations: a) The "radio" instance + instances where answers are co-constructed through cognitive processing; b) code-switching by teacher for classroom management; c) real questions and real communication (everyday).
- Evolutionary & revolutionary approaches to teacher development/training:
- How routines and deviations can be used for later ethnographic interviews, interventionist research, and theorising in terms of paradigms. E.g., Samples, Management, Testing:
  - i) revaluing management by treating it as a sample (of target-language)
  - ii) using formative assessment
  - iii) changing the nature of learner responses and teacher feedback by moving away from safe-talk
  - iv) increasing cognitive challenge
  - v) increasing linguistic challenge.
- Our counter hypothesis to Hornberger's claim for the causes of safe-talk
- Suggestions for research development: Literature on classroom discourse analysis. In-depth understanding of Cummins' four quadrants.

Implicit feedback patterns seem to have solidified into convention. Unless the teacher corrects the learners, they must assume they are on the right track. A vignette of a boy left standing, as the teacher did not appropriately respond to him, serves as a case in point, leaving him slightly embarrassed and uncertain about his effort. We also have to assume that if the teacher repeats a learner's answer, it was correct. The I-R-F response pattern may thus be implicit to some degree in a majority of cases, while I-R was the order of the day.

The teacher is not consistent in her responses (feedback) to learners. Some learners receive the conventional clapped accolade (three claps), even for "less-worthy" responses, and for others the teacher just repeats the answer.

Limited incidences occurred where the teacher actually corrected learners' answers (negative or "No" feedback), which would also indicate completion of the typical I-R-F interaction sequence.

A number of indications also point to how the teacher determined the volume and nature of learner responses. When discussing "corner", the teacher for the first time begins to expand on the vocabulary and created space for a potential response chain by asking: "Are there corners in the classroom?". The teacher otherwise created little, if any, opportunity for learner-centred interaction. One of the Limpopo students' analysis (reported further below in more detail) could perhaps serve as a possible example in this regard. It details the dynamic of shared syntax and co-construction involving multiple participants. This dynamic focuses on how errors made by learners allow for co-construction, giving the teacher the opportunity to reformulate and increase the cognitive demand. It also serves as an example of innovative deviation from the narrow curriculum. Other than that, the teacher's language use and largely teacher-centred teaching

approach reduced learners' input and therefore resulted in less linguistic "investigation and deviation". The curriculum (even more so in the new CAPS) does not allow for more learner interaction. There are no gaps in the lesson plan to allow for learners to ask questions or be more learner-centred.

It was difficult to relate specific parts of the lesson to the implementation of deliberate teacher training in each aspect. Teacher training covers three dimensions: content knowledge; subject pedagogy; and general pedagogy (including classroom interaction and management). Further research has to be designed in specific ways that would help determine that more precisely.

A hypothesis that the research team formulated at some point is whether or not cultural influences may play a role in teaching and learning in township and other similar classrooms? "African" children may be discouraged to ask questions in some cultures (and not show critical curiosity), especially when seniors are present, or may be widely exposed and conditioned to certain modes of chanting and story-telling. The question would be whether or not the structure of the lesson allows learners sufficient opportunity and freedom to ask questions, even if such cultural restrictions may be present?

The analysis conducted and reported by one of the Limpopo students[44] shed more light on matters related to the role of teacher questions. He reported a predominance of factual (pseudo-)questions for information related to word meaning. Teacher questions could take the shape of instructions or questions. It was also investigated how their use served as examples of classroom management. Very few questions were considered real questions (only two in the entire transcript). All the questions related to classroom management were actually instructions (i.e., almost rhetorical questions). Frequency analysis further revealed: there were 12 questions and 2 instructions; of the 12 questions, only one was considered a real question, with 11 being pseudo-questions; of the same 12 questions, 8 were syntactic questions, 2 were questions by virtue of comprising rising intonation, and 2 were allocated to a rag-bag category; and, in relation to cognitive challenge, all 12 required factual responses and none reasoning or opinions.

As indicated in relation to lesson goals and cognition, there should also be a link between lesson goals and interaction management. The research team has to know the goals of a lesson, else analysis may become very speculative. These are derived in part from the lesson plan, but also from additional information obtained from the teacher through an interview. What was assumed initially by the Limpopo team during early working meetings was confirmed later when the lesson objectives were established later by the Gauteng team on the basis of obtaining the lesson plan and having a discussion with the teacher, with the effect that the following prominent features were detected:

1. Practicing pronunciation – the whole class repeats aloud after the teacher the 10 or 11 words that she wrote on the chalkboard and pointed to with a ruler. In this way, learners would learn how to articulate the words and become familiar with them. The observed reading was clearly not independent, as the teacher first modelled the words, which learners then repeated.
2. Learning the meaning of new words – the teacher seems to be checking if students knew the meanings of words by asking them to provide definitions of the words. The questions often took the form of: "What is a …?", to which a functional rather than conceptual response was accepted.
3. Using words in sentences of their (learners') own – Learners were asked to use words in their own sentences.

The curriculum (increasingly so in the case of the new CAPS) is claimed by project teachers not to allow sufficiently for learner interaction. There is no space in the lesson plan to allow for learners to ask questions or lessons to be more learner-centred. The teacher largely seems to follow routines, but in spite of that, there were a few deviations which were innovative. One of them is when the teacher moved from a one-off

[44] Mphahlele.

basic definition of “radio” through an expanded functionality definition towards starting to apply students’ cognition and learner talk to the interaction. This resulted in shifts to the Quadrant B position, away from A (see discussion on Cummins elsewhere). It is proposed that when teachers become creative and flexible, multidimensional learning would occur, characterised by the use of different sources of information (schemas, and knowledge / memory). Teachers in poor socio-economic status environments often do not exercise this or have the freedom to do so; they are determined by the curriculum. However, even so the “hidden curriculum” is one of deviation, as the Department can’t put every taught word in the mouth of every teacher.

- **New concept attainment by learners**

The discussion in this section is about how the teacher guided learners and managed classroom interaction so that learners could master the intended direct learning content. The conceptual framework proposed by Allwright (1981) was helpful in further refining the unit of analysis of classroom observation in this regard. According to Allwright, “samples” (of learning content) could be a first component, which would refer to what the learners are being exposed to. The other two components or categories would be “guidance” and “management” as the processes steering classroom discourse. The latter two in particular would serve to explain language / literacy teaching and the proficiency that learners acquire. It was interesting to note that some classroom management instructions were provided in Sepedi in the present classroom observation.

Were any concepts attained by learners? The firmest conclusion that the team could reach about what learners most likely acquired during this lesson, was to say that it was “pretend reading”. The chance for teachers to step out of their existing comfort zones, or ignorance about how to incisively and quickly improve existing teaching and classroom practices towards substantively innovative teaching for concept attainment, is hampered by “face saving”. The help that teachers may ask for and/or be given (as common goal of both government and teachers) would likely be at the low-risk end of innovation.

The foregoing does not bode well for achieving the desired end of turning BICS into CALP. The teacher made no distinction between everyday terms and academic terms, and therefore there is little deliberate opportunity or purpose to move towards new concept attainment. Should the teacher adhere to such a condition, and not take control of classifying contents as BICS- and CALP-related, and of releasing such to learners, less concept attainment can be expected as a result. Should learners help to select and define terms that they don’t understand, CALP would be the more likely result. Because English is a second language in this case, the teacher has to teach even the everyday terms, and therefore the BICS/CALP framework may not be entirely relevant. It appears as if schools still have to be mindful of not creating, as early criticism against OBE’s outcomes went, “confident illiterates”. This speaks to not achieving the BICS to CALP transition.

A prerequisite for this achievement is that the teacher should close the loop from lesson goal to concept attainment. Against the background of Allwright’s trilogy (see above) of possible analysis units, it is important to know which content goals are set by the teacher, on the one hand, but also, on the other hand, what language learning she aims to achieve beyond mere curriculum implementation through classroom management and guidance. In any teacher support, one should slot in with the extent to which teachers are taught to explain the purpose of the lesson to the learners. One can assume that all good teacher-training covers that, but one may have to determine if a teacher internalised this properly and practices it in every lesson. What was the objective of this lesson? The teacher may come across as not really having followed her lesson plan, and it is not immediately clear, as a result, why the teacher was really doing what she was doing. One should also assume, though, that whoever had undergone NCS training would know that lesson objectives should be communicated to learners up-front. In this case, the

teacher did not explain to learners what she planned to achieve, e.g., learning new vocabulary (and later enhancing reading fluency on the foundations of a better understanding of concepts that will appear in the text). The teacher is therefore not priming learners for what the outcome of the lesson is going to be, i.e., "dictation" (a spelling test) at the end, or anything else. Therefore the teacher could also not constructively and openly state what the conceptual challenge put to the learners during the lesson would be.

Only two possible concept attainment issues appeared to have the ability to become salient: the excursion around "corner" and the "grammatical error" around "borrow" (used instead of "lend"). However, issues related to the standard form of the language, and versions that have at the communicative level achieved complete mutual understanding, are also at stake here, and over-purist requirements are not going to be helpful. In that sense, the objective of achieving communicative proficiency in "African English" has been met. Other than that, one is unable to really determine whether or not new concepts were attained by learners, as they were not really tested for this. Using high-frequency words to teach learners may also mean that they are not learning anything new.

A question that becomes relevant at this point is how learner attainment was (or has to be) assessed. The reading speed, fluency and correctness of individual learners were not assessed in this lesson, as it was all about group-work and chorusing. One norm suggests that learners should be able to read about 80 words per minute at this stage, and it is incredibly important to ensure they learn the decoding skills for doing so. A fundamental part of such skill will be decoding fluency, beyond mere accuracy, as the means though which to ensure that sufficient or proficient conceptual processing occurs within working-memory limitations in the human brain. If the quality of teaching is good, then the learners are able to attain new knowledge and concepts and increase their performance.

A final question that remains is whether or not classroom materials were pitched appropriately. Does an objective way of determining if the reader's text is too complex or long, or complex or long enough for learners at this level, exist (and was it applied)? One can only entrust the sequencing of language learning contents in the correct or appropriate way to curriculum developers in a system where NCS (and CAPS after that) has become quite specific about the lesson contents and other related lesson presentation requirements.

One of the post-graduate students[45] from Limpopo took on the task of trying to determine the extent of conceptual knowledge transfer and gain. He did his illustration especially in terms of the relationship between language production and cognition. He also applied the notion of co-construction to the use of language to increase cognitive demand. This was further phrased in terms of the concepts of shared syntax and the grammar of co-constructions. He focused on the following:

- How teachers model language use (especially sentence construction); and
- More specifically, co-construction at different lexical and syntactic units, e.g., co-construction at word level, with sentence construction, and in elaborated syntax.

Co-construction is conceptualised as lexical units or clauses that are produced collaboratively by the conversation participants (Lerner, 1991, 1994, 1996), is either teacher-initiated or learner-initiated, or co-constructed by the teacher and learner/s. Co-construction may take several turns (including several contributors) from the point of initiation up to final acceptable construction (e.g., Selection 1 from p.11 of the transcription – "What is a street?"). The lesson and analysis by the student demonstrated how co-construction (irrespective of the initiator) occurred at different syntactic levels, both at constituent boundaries and also within constituents and even within lexical units (e.g., word form or tense).

[45] Mashatole.

Hence, the conclusion was that syntax was shared and jointly produced, from the smallest units up to larger sequences and sentences.

Why focus on syntax through co-construction? The reason is that the English language is heavily inflected by a variety of grammatical categories: tense, aspect, transitivity, form, gender, voice and case. However, each unit in the clause/sentence is inflected in a form that shows its function in the broader clause. This means that in co-construction the form of each item in both initiation and the final part is controlled by the emerging unit as a whole. Zooming in on this provided deeper analysis of syntactic processing as being essentially interactive, rather than occurring in isolation in the individual or the learner's mind, can shed more light on how learning takes place.

As illustration, the following dialogue from the transcription (p.12) was focused on:

T: …. *What is happening in the shebeen? Let's hear.*
L: *They drink alcoholic.*
T: *….. They drink….alcohol****.***
Teacher continues: ***….*** *When our parents go and buy beers or (they buy) wines...they drink there. Then the person who drinks every day, we call him an alcoholic.*

In the co-construction, a preliminary component (or initiation) is uttered by the teacher, which is in the form of a question. By doing this, the teacher builds up a conditional frame upon which the learners have to generate a sentence. The conditional frame of the construction is centred around things that "usually happen or take place in a shebeen". Within the conditional frame, the teacher expects a response more or less similar to "People drink 'something' in a shebeen".

Interactively, the "*What happens in a shebeen?"* question warrants a subsequent "*They drink something"* response. It is also important to note that the "*They drink"* clause (by the learner) strongly projects greater awareness of subject-verb agreement - that is, when the subject is plural the verb does not take the suffix "s". The learner, however, makes a wrong judgement about the form of the word "*alcohol"* as *"*alcoholic"*.*

The teacher accepts the "*they drink"* clause, but also makes an additional input, by correcting the learner's error to make up the final construction of the sentence – "*They drink alcohol".* This teacher input falls within the broader structure of co-construction. So what can be concluded about the teacher's notion of language learning and syntax elaboration, as a result? Two things, perhaps: (a) the teacher pedagogy is largely within the transmission model, that is, language learning viewed as product of transmission, and (b) the lesson is largely teacher-centred.

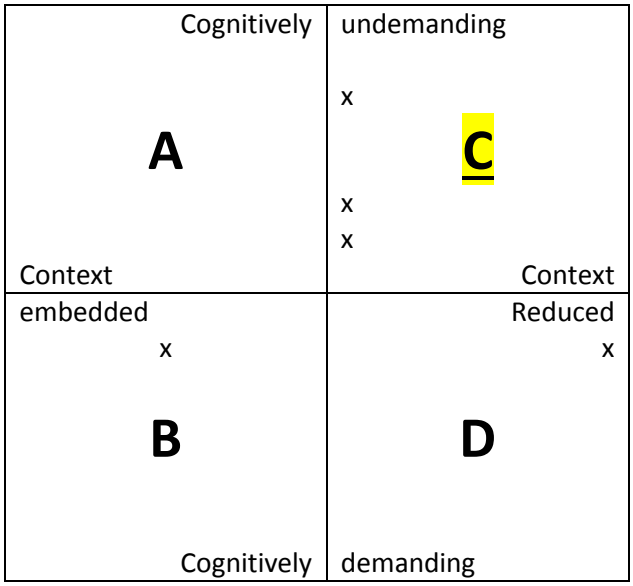
For the rest, there were very few other conceptual tasks or gains involving learners. By using the four-quadrant model of Cummins again as matrix for illustrating linguistic effort, the outcomes for three kinds of interaction are summarised briefly before showing the diagram again:

Repetitions: They are chorus responses; little or no reading occur at all … rather repetition; no connection is made between literacy or oracy; the linguistic effort falls within Quadrant C of Cummins' scheme - little cognitive and linguistic effort.

Restatement in own words: The linguistic effort is relatively greater than for repetitions; the linguistic effort required is being able to infer collocations, meanings and uses from words, e.g., "radio" for listening, "announcement" for announcing messages, and "street" is a road; etc.

Using words in context: This entails providing contextualised examples of individual words (e.g., T: “Can you make a sentence using the word today?” L: “Today I go … I go to school.”); the linguistic effort of using words in context is also relatively greater than repetition; however, it requires little cognitive effort.

(Repetition; recall)



(Conceptual engagement)

In summary, regarding cognition: All the imitation efforts of learners put their activities in Quadrant C. Similarly learners running their fingers along the text to keep pace with the teacher’s reading aloud is a form of pretend reading (also in Quadrant C). The elicitation-for-meaning questions comprise low-level cognition based on thinking about factual information drawn from everyday life. These learner efforts could be placed at the lower end of Quadrant B. There were no Quadrant B deep-end learner efforts (of the kind we find in Barnes). The dictation (spelling test) is an example of Quadrant D (upper-end), i.e., zero-level cognition with high context-reduced language.

Selection 2 – Group reading

In this snippet, the activity involves the learners being instructed to open their reading material for the week on p.6. Pages 6 and 7 formed the new reading task for the day (Thursday). The foregoing pages have been covered over the preceding days, with the final two pages scheduled for the next day. The reading text comprises a set of photocopied pages each with a picture and 10 lines of related printed text telling a story. The story deals with a man winning the lottery. The teacher first reads the two new pages twice, with readers following using silent reading and tracing their progress with the finger. She then corrects a typographical error[46] on p.7 (“be” changes to “me”). Then the learners twice read the text on p.6 aloud after the teacher, sentence by sentence. The full passage on p. 6 is then twice read together by the teacher and learners, after which the learners alone read it once more. They are then encouraged to applaud themselves. (A similar routine is pursued afterwards for p.7.)

[46] The parts that follow extend beyond the narrow selection below from the transcription.

Transcript 8 Selection 2: Reading p.6 from their flip files (26:40 – 28:10)

Activity / action	Transcription
The teacher instructs learners to open their books on page 6 (learners open their flip files to the allocated page) and follow and point with their fingers as she reads. [A] Learners are instructed to read silently with the teacher and not verbalise their words. Teacher walks between the desks as she does so. Then Page 7. [B] Then repeating both pages another two times. [A and B] During this, the camera pans the classroom and focuses on the educational posters placed on the walls Teacher talks to a learner (back right corner) and instructs learners to share books, learner begins to move, and rearranges himself in his chair. When the learners are distracted and follow what the boy is doing, the teacher looks directly at these learners and instructs them to continue looking in their books and follow as she reads. (Some learners remain distracted by what is occurring with the boy.)	Teacher: "Let's open our book on p.6. I'm going to read with you. I'm going to read p.6 for you. You listen. You look inside your book. You point when I'm ... where I'm ... I'm reading. You don't read. It's ... You don't say anything. You read, but I don't hear your voice. You must read in silence. Now. [A] The next morning, the winning numbers were announced on the radio. He asked his friend to check the numbers for him. The numbers were the same. He went to the street telling everyone about it. Page 7. [B] He said: "From today, call me Mister Joseph – the millionaire". He went to shebeens, to church and every street corner. He told everyone who could listen. I'm just going to read it again – you listen." [A] The next morning, the winning numbers were announced on the radio. He asked his friend to check the numbers for him. The numbers were the same. {Sit with S. Sit (?? Sepedi ??} He went to the street telling everyone about it. Look inside your book where I'm reading. [B] He said: "From today, call me Mister Joseph – the millionaire". He went to the shebeen, to church and every street corner. He told everyone who could listen.

- **Cognitive comprehension effort required of learners**

In as far as authentic reading or recalling spoken sentences go, there is not much, if any, real reading. The learners seem merely to chorus and repeat after the teacher. They are not all following in their books. It therefore comes across as somewhat ironic when the teacher at the end says: "Clap hands, you can now read p.6". Learners may actually not be reading; they have just learnt to repeat the same sentence more than six times.

One expects the teacher to recognise that reading is more about comprehension than just being able to say words (i.e., not just "barking at text"). The teacher, though, allows the lack of true engagement to remain. Another issue is whether or not the kind of observed repetition is the right way of creating automaticity in the English language. The lack of emotional engagement when reading the text further undermines reading for meaning and finding it pleasurable. The teacher comes across as having been lured into just getting through the text and the lesson, because she has to. As a result, there is no or very little effort from the side of learners; they are (could be) just parroting.

Looking at the opportunity created for engaging learners in reasoning, it is concluded that no (very little) cognitive processing of the written text occurred. The teacher missed the opportunity to engage learners more, allow more reasoning activity, help learners infer meaning, ask about the reasons behind the immediate actions in the pictures and the related text, etc. The teacher could have used the text to help learners learn to reason by making use of the opportunities the text provided. Also in terms of Cummins' conceptual framework, learner effort can be characterised as linguistic effort of low-cognition value. Nothing like the single exception that took place in the previous selection, where the teacher broke the teaching routine by asking what a radio is used for, occurred again.

After “reading the text”, the teacher continued with the assessment task immediately. She did not leave or make time for the learners cognitively to engage or reason – draw conclusions, as it were – on the basis of their assignment for the day.

Assessing if any individual learner proficiency gain had been achieved, the finding is that no learner was called upon to read individually, therefore many learners don’t follow in the text as they know they are not going to get asked to read or be caught out for not following. Should the lesson have been structured to allow more learners to read individually, it would enable the teacher to assess learners individually, while still allowing the other learners to pick up fluency from each other.

In relation to progress from BICS to CALP, it is concluded that little cognitive effort was required of learners as the words were high-frequency words that the learners were already familiar with. They also only had to recall information that they have just heard, because of the nature in which the “reading” exercise was structured. It would allow learners to rely on memory, and not decoding and comprehension.

- **Terms and management of interaction**

One of the students[47] from Limpopo compiled her results from analysis of the occurrence of interaction patterns, including feedback in particular, from the eight identified exchanges in the snippet. The findings are set out below. From this analysis it is clear that a minority of exchanges led to explicit feedback as part of concluding complete I-R-F interaction cycles. “Feedback” remained implicit, if anything.

Referring to the line formatting in the original transcription in Annexure 5, a schematic summary of the explicit and implicit feedback exchanges is provided in Table 5.6.

Table 5.6: Explicit and implicit feedback by the teacher (number of exchanges)

Line number	I-R-F*	I-R(-F)	I-R	Comment	Total
1-4			1 (Exchange 1)		
5-7			1 (Exc. 2)		
8-10			1 (Exc. 3)		
11-12			1 (Exc. 4)	? disciplinary talk	
12-13			1 (Exc. 5)		
13-14			1 (Exc. 6)	? disciplinary talk	
15 – 17	1 (Exc. 7)			? change of task	
20-23	1 (Exc.8)			? change of task	
Sub-totals	2		6		8

* Initiating moves (I); Responding moves (R); Feedback moves (F)

From the data analysed[48], eight exchanges were identified. The I-R structure dominated (6 instances) and there were only two instances of the I-R-F structure. Therefore the teacher does not give much feedback. This is because the task given to the learners (reading silently while the teacher reads aloud) does not require any response from the learner to which the teacher can give feedback (first six exchanges). Also, there is no way the teacher can know if they are reading silently.

In the seventh and eight exchanges, there is explicit feedback by the teacher because there is a change of task. Learners have to respond verbally and through actions (when student correct a typological mistake in the reading passage as pointed out by the teacher), so the teacher needs to give feedback.

[47] Bopape.
[48] Again the two final exchanges are from the selection in the full transcription, and following on the one cited earlier.

No instance of implicit feedback could be found (I-R(-F) in the table), in comparison with the other snippets, where the I-R(-F) structure was predominant.

The task of repeating the teacher's words was too easy for the learners and they always answered correctly. Therefore there was no need for the teacher to give feedback, and she just continued to the next task. The questions did not require high-level cognition from learners.

Selections 1 and 2 so far could both be examples of safe-talk (Hornberger and Chick, 2001). Why do teachers practice safe-talk? The explanation may lie in learning not being learner-centred in this case; students said what the teacher wanted them to say and did not raise their own views or questions. Teachers may also be afraid of receiving challenging questions from learners.

In relation to classroom management, the teacher continued to "read" at a number of points, and did not manage the class efficiently, irrespective of their continuing to play with their books or each other, or still trying to correct the error that the teacher pointed out. As a result, they just repeated after her what they heard while doing other things. The teacher did not give learners enough time to make the correction before continuing with the reading. Many learners were still distracted when she continued reading, but they still managed to repeat the words after her. The teacher did not check that they were all following. Again, the teacher assumes that chorusing is reading and learning.

The teacher is not creating any excitement about reading. She is not reading with emotion or attempting to evoke any emotions in the children to get them excited about reading. The teacher falls prey to the trap of mechanical reading herself. There is superficial good practice, but the interaction is at a mechanical level.

Interestingly enough (see student insert above), four exchanges occurred in Sepedi in this snippet in between the reading task, all having to do with arranging classroom activities, learner behaviour and learning materials.

Regarding the kind of discipline the teacher exercised, she came across as a powerful person, maintaining good discipline. This may result in her being perceived by the learners as less approachable, thus reducing learner interaction. All interaction was whole-class interaction; learners were given no group-work.

In terms of attempting to assess the lesson interaction, and the teacher's management thereof, against the assumed goals of the lesson and lesson plan, as these were never made explicit by the teacher to the learners, it was difficult to deduce what the goal behind this snippet was. The reason for this is that the teacher read the same text aloud and expected learners to follow her reading by pointing at the lines in their books. Once this recognition of text/letters had gotten accomplished a few times, they were asked to read aloud, first with the teacher, and then on their own. This expansion may signal that fluency in reading is pursued, although it is still not certain for many learners if they merely echo by-now familiar phrases or actually read with meaning while decoding.

- **New concept attainment by learners**

If gaining fluency of English reading was a purpose of the lesson, it was not attained effectively. One is furthermore unable to directly determine this in the absence of assessment of individual reading.

The team did not really think that any new concepts were attained by learners.

Although vocabulary and spelling, and reading and fluency may in principle have been covered by the lesson, from the learners' point of view and behaviour we are unable to declare the achievement of higher-order thinking or indicate that new concepts were attained.

Selection 3 - Assessment

This final selection[49] dealt with the "assessment" task at the end of the lesson. It would conventionally be seen as a spelling test, and was scored by the teacher as such, although being announced to the learners as "dictation". The teacher preceded the assessment with a lengthy preparation of learners for creating the appropriate space for it in their workbooks, guiding them to write and underline the date, heading and assignment as a whole, and preparing two pre-numbered columns for the 10 words to follow. After confirming that everyone was ready, she proceeded arranging how they should forward the books immediately on completion of the "test", before announcing every item's number in succession, and reading each word at least twice.

Transcript 8 Selection 3: Assessment / dictation (9:34 – 13:47 – second part)

Activity / action	Transcription
Teacher gives the assessment. (1, 2 .... 10) Learners keep their work closely hidden. Teacher makes sure everyone is ready (2x). Books are passed to the front of the row – in organised and disciplined way. (Announcing Item "2", some learners completed in chorus with "day" – Two-day) ☺	Teacher: "Is everybody ready for number 1? Learners: "Yes." Teacher: "Is everybody ready for number 1? Learners: "Yes." Teacher: "Who of you are not ready? Raise up your hands, those who are not ready. ... Who didn't finish writing their date? I'm go'int to ... I'm going to give you only three minutes to finish it. When I clap my hands, everybody must be prepared to write number 1. ... ... (helping individual learners) Draw a line ... at the end of number 10. I'm going to call number 1. When we finish writing number 10, everybody, you bring your book to the front. You don't stand up; you just bring your book to the front. I'll get your books at the front tables, nê. Now I'm starting number 1." Learners: "Yes." Everybody's ready? Number 1." Learners: "Yes." Teacher: "Today. (To a specific learner →) A, you must write inside the lines. Don't just write. ... Two." Learners: "Yes." (Some complete – "...day") Teacher: "Church ... church ... church ... Three." Learners: "Yes." Teacher: "Make it snappy ..... (Sepedi) Three. Listen ... listen ... listen .....listen. Three (Sepedi ... number three) Where are you? Number 3 ... listen ... listen. Number 4." Learners: "Yes." Teacher: "Number 4." Learners: "Yes." Teacher: "Street ... street ... . Number 5." Learners: "Yes." Teacher: "Corner ... corner. Six". Learners: "Yes." Teacher: "Read ... read ... read ...read. Seven." Learners: "Yes." Teacher: "Seven." Learners: "Yes." Teacher: "Radio ... radio ... . Eight." Learners: "Yes." Teacher: "Win ... win ... win. ..... Win. Eight. ... Nine." Learners: "Yes." Teacher: " Tell ... tell. .....The last one." Learners: "Yes." Teacher: "Number 10."

[49] This selection, and the final parts of the previous one, have not been subjected to full group discussion as time ran out at the working session. However, everyone's written inputs after two more regional working sessions were received and have been included in the reporting of the findings here.

Activity / action	Transcription
	Learners: "Yes." Teacher: "Morning ... morning ... morning. ..... Everybody, pens down. Close your books. Pass your book to the front. Don't throw it. Just pass your book to the front desk. Pass your books to the front desks. O, pass your book to the front. All the books must come to the front.

- **Cognitive comprehension effort required of learners**

Because learners were expected to write down, i.e., also spell, those words that were read to them, one can assume that cognitive processing and reasoning had to take place. It essentially is about turning phonemes (sound options) into graphemes (writing or spelling options), irrespective of whether or not learners have been exposed to such terminology in previous phonics lessons.

One of the students[50] from Limpopo, in his analysis according to Cummins' four quadrants, characterised the assessment as one requiring some linguistic (memory) effort, albeit of low-level cognition value, fitting into Quadrant C. More detailed analysis of how learners achieved on the test follows later.

- **Terms and management of interaction**

The main dynamic scrutinised again in this sub-section is the one of the link between lesson goals and interaction management. Having explained to learners what the purpose of the lesson is, would have helped in preparing them to think / reason in a certain manner. By telling them that there is going to be a spelling test, they may begin to look at the vocabulary / words in a different manner. They would actually consider the spelling of the words, instead of just chorusing. This would link more closely to cognitive reasoning and processing, which may not have been happening at many stages of the lesson as it has not been introduced.

The (Gauteng) team undertook debriefing discussions with each observed teacher only after doing some preliminary analyses. Overall interpretations were communicated in positive ways and avoided coming across as a lesson or "performance" evaluation. These sessions coincided with completion of the structured teacher interviews. The Grade 3 EFAL teacher was not more specific about the lesson goals than saying the intended task was group reading. Teachers' individual conceptualisations of literacy are covered later in Section 5.4, but suffice it to say at this point that the present teacher voiced some understandings that could indicate what her implicit theory of language and literacy acquisition and development could be. This reflects to some extent how she sees the goal of each lesson in a generic way (see Annexure 5). Attempting to bring implicit conceptualisations and theories to the surface in this way also serves to begin to understand teacher practices. The teacher suggested that the systemic routine and progression of building all next learner proficiencies on all previous ones is what makes for learners successfully becoming language proficient. In that sense, it is a systematic and well-structured routine "slog", with lots of scaffolding and stepped progress, retrospective confirmation, and gradually enhanced complexity, speed and proficiency. No single "event" or moment or point or technique can be said or employed (expected) to bring sudden illumination to learners. The Grade 3 teacher considered the best analogy to describe what teaching and learning is about in the FP as extending, as it were, the home space where a toddler is always around the mother or other caregivers, and mimics and learns everything in her stride. This not only accounts for language, but also social and other behaviours, attitudes, etc. The only hope that teachers can have is that when a child's contact with the school has ended, some of the mimicked behaviours and values, and the acquired knowledge from primary school would be put to good use by the learners in the outside world, being high school, further studies, work, social structures, etc.

[50] Morapedi.

- **New concept attainment by learners**

To the question about how strongly lesson goals drove the conceptual focus of the lesson, it was again clear that the teacher did not prime the learners that they were going to have a spelling test at the end, losing a potentially valuable stimulus for steering the expected conceptual gains. As a result, there was a disjuncture between what the teacher taught and assessed; between explaining the meaning of words and learners' understanding of their meaning; between teaching meaning and determining the writing proficiency of learners through their spelling of words by doing a spelling test.

On the matter of language didactics and pedagogy, and assessment and achievement, the teacher assumed that the mere presence of the words (on the chalkboard and in the reading text) and the fact that learners saw these words, would convert into retention of their spelling.

Chorusing was evident in the test result; also learners' lack of engagement with the written word. Learners, in their spelling effort, relied more on the way words may be spoken (including their African pronunciation), than on language rules. When reading, learners were very often not looking at the written word, but merely repeating what the teacher said. Chorusing gave the impression that learning was taking place, but the results show that it didn't. The teacher didn't teach the learners what could trip them up in English, such as the silent "r" or "t". Teachers should teach learners of this age the specifics of English, so that the learners are able to use this language in education at a later stage.

One concern is that the teacher had not formally been trained to teach English / language. This may therefore also show in the learner achievement outcomes. It was (is) assumed that if a teacher can speak the language (even as home language), s/he is also able to teach it.

Brief error analysis, such as the one following in Table 5.7, may be used very productively during feedback and support to teachers, as research participants and through regular district- and school-based processes, and also through these to their learners afterwards, to guide teachers towards how to teach words to ensure that the learners obtain a better understanding of the different concepts in English.

Table 5.7: Spelling test results of a selected small sample of learners

Learner	today	church	listen	street	corner	read	radio	win	tell	morning	Score
1	1	0	0	1	0	1	0	1	0	0	4
2	1	0	0	1	0	1	0	1	0	0	4
3	1	1	0	1	0	1	1	1	1	0	7
4	1	1	0	1	1	1	0	1	1	1	8
5	1	1	1	1	1	1	1	1	1	1	10
6	1	1	1	1	1	1	1	1	1	1	10
1		chach	lisin		conna		redio		tele	maning	
2		chush	listin		conta		redio		till	moning	
3			litsan		-					mornigg	
4			lisen				roido				
5											
6											
Total	6	4	2	6	3	6	3	6	4	3	
correct	100%	67%	33%	100%	50%	100%	50%	100%	67%	50%	
error		-u-; -r-	-e-; -t-		-r-		-a-			-r-;	

The very simple analysis in Table 5.7 shows the errors in cognition. The teacher should have focused during the lesson on available tools for teaching learners how to spell these words if the purpose has been to do a spelling test. The test results of a small sample of six learners, selected by the teacher to represent good, average and struggling learners, are included to illuminate the nature and usefulness of information that could be derived from the assessment, but also to inform the question of whether or not learners gained conceptual knowledge during the lesson. The spelling words appear at the top. Learner test scores appear in the final column. Item statistics appear in the final row. (Key: 0=wrong; 1=correct.) As any good formative assessment does, such a table succinctly answers two key questions. Which parts of the work do learners struggle with? Which learners struggle with that/the work?

In closing, key findings suggested from analysis of the observation data from the Grade 3 EFAL lesson in a Pretoria township school in Gauteng are summarised next on the basis of the chosen three-part conceptual analysis framework:

- The cognitive comprehension effort required of learners is not challenging enough because of the use of familiar high-frequency words in reading practice and assessment, not using a structured, integrated, deliberate and explicit strategy for building vocabulary and language content, focusing more on recall instead of knowledge creation, not introducing the purpose of the lesson explicitly upfront, not capitalising on the use of morphological and grammatical signifiers in words and sentences to facilitate retention of meaning and comprehension among learners (e.g., parts of speech such as nouns, verbs and adjectives, and number, tense, etc.), not drawing attention to appropriate phoneme-grapheme interconnections to speed up automation of decoding, not using deliberate strategies to step up to CALP from BICS, not engaging learners enough conceptually, providing learners too little individual reading and writing opportunity, achieving very little "real" connection with written text (although the teacher bemoaned the added task of having to teach learners cursive writing again from the fourth quarter in Grade 2 and from Day 1 in Grade 3), not extending learners beyond single-word or -sentence responses, and not being allowed (Department, curriculum) the use of code-switching and other language resources available to teachers in multilingual contexts[51].
- The management of teaching and learner interaction remains conventional instead of innovative, uses fossilised "rituals" for phonics, shared reading, handwriting / dictation / vocabulary, assessment, etc., gets reduced to mere learner repetition or echoing of "heard" words vis-à-vis authentic "reading"[52], does not entail conscious placement of the lesson contents on the basis of announced lesson goals into response and feedback tasks involving learners (e.g., tasks set and assessment of their achievement), overplays the role of the chalkboard and front-side of the classroom, provides learners little opportunity to initiate interaction (within the role of culture in relation to respect and curiosity), becomes implicit and diffuse rather than positive and explicit in as far as feedback goes, does not engage learners emotionally and motivationally, and neglects individual learner activity, confirmation and formative assessment (in contest with large classes and the obligation put on teachers to get through their work at all cost without any flexibility).
- Concept attainment by learners becomes difficult to advance and detect within loosely structured group participation (reading becomes hearing, remembering and echoing), is not driven by clear lesson goals and structures (e.g., requiring higher individual reading fluency and accuracy, greater vocabulary, improved spelling), and suffers from the influence of spelling by pronunciation in the absence of pointing out appropriate language rules.

[51] The teacher related that policy doesn't allow them to use African home languages in English lessons. They may only translate single words in emergency cases, such as the names of diseases in Life Skills, or some abstract words or collective nouns. Teachers try to anticipate classroom contents and prepare by looking up English words in their Sepedi dictionary, or research other sources in advance. Pictures, actions and definitions are used to avoid code-switching. The teacher cited information that shows that learners fixate on (remember with higher salience) knowledge using code-switching, and forget most of the rest.

[52] During debriefing the team acknowledged that not all desirable activities can occur in every single lesson; some teaching and learning earlier in a week or quarter is further expanded or assessed only later.

Analysis of a second English First Additional Language Grade 3 lesson (Soweto)

This lesson covered two distinct parts. The first part was about teaching the learners about converting present tense into past tense. This was followed by a spelling test. The two parts were technically not related to each other. The assessment comprised evaluation at the end of a cycle of material completed by the learners earlier as well, and not during the lesson of the day. The assessment work was phonics-based. It was about the two different graphemes (writing or spelling forms) for a single phoneme, which was the "o"-sound as in "toe" and "boat". This assessment also had two activities. First, learners had to write down the spelling of 10 words. This was followed by another 9 words, and 5 word pairs with different spellings for same-sounding words (homophones).

Reporting in this section differs from that for the other English lesson. It was decided not to analyse the lesson contents in more detail, besides providing the full transcript (Annexure 6) and making some very brief comments below in terms of the conceptual topics from our three-part analysis framework. The focus will then move to the evaluation session, which revealed insightful dynamics in relation to the influence of classroom and teaching management on learner achievement.

The first part of the lesson was a discussion around a poster with the theme "At the zoo". Learners first warmed up singing and acting a familiar clap song. The boys then efficiently moved and arranged the learners' chairs into a semicircle close to the chalkboard. Once the learners took their positions, the poster was pasted on the chalkboard. The teacher engaged learners by using word cards and arrows that were affixed to the poster while the learners responded to her questions about activities depicted on the poster. The learners, either as individuals, as requested, or in chorus, were asked to name animals and people at first, but also later their actions. Initial naming of animals took a short time and served as revision of engaging with the poster on a previous day. This is typical of the thematic coverage of a topic and related activities over a period of a week or two. The actions and activities related to people specified by the teacher were identified in the present or present continuous tense. Learners then had to convert these statements into the past tense during the final part of the lesson. Learners were engaged well and largely responded correctly.

Key observations are summarised briefly, without detailed reporting and analysis, on the basis of the chosen three-pillar conceptual analysis framework:

- The cognitive comprehension effort required of learners was to build up sentences (five) in the present tense around activities identified from a poster on the board, after which they were steered, as a group and individually, to convert them to the past tense. Their task was pointed out by the teacher by using the actual words "present" and "past" tense, signifying an appropriate challenge in relation to understanding new grammar concepts and new language content. The lesson purpose was not explicitly introduced upfront, obviating the chance of further facilitating the conceptual challenge and intended gains. However, the teacher was perceived to use some deliberate strategies for stepping up to CALP from BICS. The teacher also extended learners beyond single-word responses, also at the individual level, as they had to produce full sentences on the spot.
- During management of the teaching and learning interaction, the teacher all the time solicited both individual and group responses. She provided clear feedback about the correctness of a majority of responses (by saying "Good!"). In a minority of cases feedback was implied as she just moved on to the next task when there was no need for corrections or other follow-up. Learners were not otherwise provided opportunity to initiate interaction, but were engaged well emotionally and motivationally.
- Concept attainment by learners for the lesson entailed revision of vocabulary from work during the previous week (identifying and naming animals and people). This then got extended into having to provide sentences about the people and their activities, as reflected on the poster. These sentences were then, as the main assumed goal of the lesson, converted into the past tense. The grammatical

feature of tense was specifically pointed out to and named for the learners. Most of the learners seemed to have gained this new concept of past tense, or at least solidified previous existing initial knowledge about this even further.

We now move on to the learner assessment part, which provides quite interesting information about the actual proficiency and achievement of selected learners. The nature of the mistakes made by learners suggests how classroom management and related didactical approaches may have contributed to these mistakes, also within the context of learners struggling still to master an additional language. An opportunity was again used to select and study the test responses of a few well-achieving and a few struggling learners, who were deliberately identified as such. Two learners could not write at all.

- **Classroom interaction, conceptual gains and cognitive challenge – special classroom-management determinants**

The spelling scores and mistakes of selected learners for Activity 1 are presented in Table 5.8. The patterns reflect two crucial phenomena. The first is how chalkboard practices seemed to have influenced the strategy that learners tried to employ to get their spelling correct. The second is how certain techniques that had been taught before may have been used to derive correct spellings for the required words. The maximum score that a learner could earn for this activity was 10.

Table 5.8: Scores and error analysis for selected learners for Activity 1

Lrnr	groan	foe	boat	doe	of*	soap	toe	toast	was*	coat	Score
1	1	1	1	1	1	1	1	1	1	1	10
2	1	1	1	1	1	1	1	0	1	1	9
3	1	0	1	0	0	1	1	0	0	0	4
4	0	0	1	0	0	0	0	0	0	0	1
5	0	0	0	0	0	0	0	0	0	0	0
a	1	0	1	0	0	0	0	0	0	0	2
b	0	0	1	0	0	0	0	0	0	0	1
1											
2								toest			
3		foa		doaw	oaf			toest	woes	coet	**
4	grnoa	foan	boat	doay	oaf	saep	tae	toesd	yasz	kaet	
5	koang	engno	#	##	off	soehoy	boehelo	bsoeheed	teoehohey	hooeyeha	#
a	groan	foar	boat	doaw	off	soep	toew	toewst	woez	-	**
b	goaun	foa	boat	doai	oafo	soep	toew	toest	woes	coet	**
Total correct	4 67%	2 33%	5 83%	2 33%	2 33%	3 50%	3 50%	1 17%	2 33%	2 33%	
error		oe > oa		oe > oa	o > oa			oa > oe			
#	blnenbyeh										
##	thoandeyb										

* Note the inclusion of two high-frequency (simple) non-diphthongs ("was" and "of") to establish if learners still knew the earlier spellings and slightly different pronunciations related to "a" and "o" when not part of "oa".

The chalkboard practice that may have had a huge impact is visible when comparing the kind of spelling mistakes which learners made in relation to the first five and the last five words. It is evident that a large predominance of words in the left half of the table (first five words) were spelled incorrectly by selecting the "oa" grapheme. For the right half (final five words), incorrect spellings are associated with the "oe" grapheme. How can this be explained or understood?

One suggestion is that the answer lies in how the teacher set up the testing session. Learners were prepared in detail beforehand to write the date and caption for the test, to underscore everything correctly, and to pre-insert the numbers for the ten anticipated spelling items to follow as two columns of five each. Words 1 to 5 appeared in the left half and 6 to 10 in the right half. This in itself would not have been problematic.

However, just before leading learners through the above on the chalkboard, the teacher also reminded them that the day's test was about the "oa" and "oe" spelling versions. She wrote these two letter combinations next to each other, with "oa" on the left-hand side. When instructing them to prepare the test page, that preparation was done immediately below these two letter combinations. It therefore appears as if those learners who got the spelling wrong, and did not conceptually know the correct spelling well, used the above structure as a clue for where to expect the "oa" and "oe" words, being all to the left and right respectively!

It can also be assumed that the teacher neglected in her earlier teaching of this to derive and highlight a rule, or at least made sure that learners internalised it, such as that words ending on a vowel is spelled by using "oe".

A final comment concerns an example such as "grnoa" (see Learner 4 on the first word). It was evident that some learners, such as this one, most likely led by the teacher in teaching this concept, applied a method using colour crayons to first identify and position the known consonants, leaving space for the vowel/s, before deciding on and inserting the correct vowel, written in another colour. The sequence used would look like this: "gr ___ n". However, getting into a mechanistic recipe led this learner to complete it as: "gr n oa", by getting the consonants out of the way first before adding the vowel/s.

The second test activity revealed a few additional interesting things. Only the fact that a number of learners used confabulatory writing when they could not write at all, is pointed out. That means that they just produced anything that they knew or could copy from somewhere to give the "safe" and socially acceptable impression that they were actually writing and able to do so. The results appear in Table 5.9. The maximum score that a learner could earn for this activity was 14.

Table 5.9: Scores and error analysis for selected learners for Activity 2

Lrnr	boat	pie	drove	fight	slow	smile	cry	coat	toe	ship/ sheep	bad/ bed	bit/ bite	ship/ chip	pet/ pit	Score
1	1	1	1	1	1	1	1	1	1	0.5	1	0.5	1	0.5	12.5
2	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13
3	1	1	0	1	1	1	1	0	1	0	0	0	1	0	8
4	1	0	0	0	0	0	0	0	0	0	0.5	0	0	0	1.5
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1										- / shep		- / bat		pat / -	
2							crie								
3			drave					coet		sheep/ ship	bed/ bad	beat/ brit		pat/ peat	
4		#	#	fiat...	#	#	#	koet	toey	sip / -	- / bed?	- / ??	(<?)baet	spa	
5	##	##	##	##	##	##	##	##	##	##	##	##	##	##	
a	boat	doay	droavu	fut	sloay	smumol	cray	coet	toast	shap/ -					
b								koet	toay	shoep					
Total	4	3	2	3	3	3	2	2	3	1.5	2.5	1.5	3	1.5	
corr	67%	50%	33%	50%	50%	50%	33%	33%	50%	25%	42%	25%	50%	25%	

		Errors related to Learner 4 (#)		Errors related to Learner 5 (##)
boat	-	boatmabamoakbazamnuzamabaza	-	bhgheghvehnelwebheyehohe
pie	-	aysamazabamszanebakamabamas	-	behcehewghehceshvehel
drove	-	yamamabazamanubamzamabamazabanu	-	hewetwewbghvehewbin
fight	-	fiatmabawazabatamasanudamaba	-	eahvehoveh
slow	-	syawayama	-	shwawewenew
smile	-	mayabamapabala	-	smwcehvehowehi
cry	-	rayamayamba	-	heehyewehgheithob
coat	-	koet	-	letwahaheegnartho
toe	-	toey	-	shghewene
ship-sheep		etc (as provided)	-	shaveyehpha
bad/bed	-		-	hegiweh
bit/bite	-		-	beheweh
ship/chip	-		-	bemcehe
pet/pit	-		-	heyenewey

Sepedi Home Language Grade 1 lesson (Mamelodi)

The goal of this lesson was to teach learners to recognise, read and write the “kg” sound in Sepedi. It was stated by the teacher only on introduction of this segment of the lesson a few minutes into it. The first part of the lesson was a warm-up discussion about what learners did over the weekend. They then revised a few words (vocabulary) that they did at the end of the previous week. This was further cemented into their thinking by requiring them to make short sentences with these words again. Then the new sound that had to be learned for the week was introduced. It was done in a range of iterative ways. These included seeing it written on the board, saying a poem with many words with that letter in it, having the teacher write the poem on the board, talking about every relevant “kg”-word in it, requiring learners to produce more words with “kg” based on pictures that the teacher pasted on the board, revising the song again, providing more words, and making short sentences using these words. The class was then given differentiated tasks according to the proficiency-based groups the learners already sat according to. The first group glued beans over the letters “kg” written on sheets of paper. The second found and circled the “kg” letters from text in their workbooks. The third group wrote words spelled with “kg” from the chalkboard in their workbooks. Annexure 7 entails the full transcription for this lesson.

Key observations about this lesson are summarised briefly, without further detailed reporting and analysis, on the basis of the chosen three-part conceptual analysis framework:

- The cognitive comprehension effort required of learners was to discover and use the oral and written use of the “kg” sound combination (blend) through/from a variety of source materials. The lesson purpose was explicitly introduced when the appropriate segment of the lesson started. It was also fitted into the broader progression of a new letter (sound) every week. This would serve the purpose of focusing learners on the outcomes that they would be expected to have mastered after the lesson. Learners throughout sat in proficiency rows, and were at the end of the lesson required to complete an assignment appropriate to their proficiency. Not many examples of explicit teacher strategies for stepping up to CALP from BICS were observed, although the lesson was filled with diverse activities that may lead to this objective implicitly. The teacher already extended learners beyond single-word responses, also at the individual level, by requiring them to produce short sentences.
- The teacher was active and competent in relation to managing the teaching and learning interaction, and appropriately moving between individual and group responses. Feedback is largely implicit, though,

and often based on the “Yes” or “No” responses she expected from learners to verify that they considered the fact or knowledge that she presented them with, as true / correct. Positive feedback was implied when the teacher just moved on to the next task without querying, correcting or restating something again. Learners were otherwise provided limited opportunity to initiate interaction, but were engaged with enthusiasm most of the time.

- Concept attainment by learners for the lesson entailed mastering the “kg” sound. This is evaluated to have been achieved quite well. It was also accomplished appropriately by splitting learners into three proficiency groups. This applied during the whole lesson, but was not used conspicuously then, as with the learner task at the end. The shape and sound for the word “cat” was even overlaid on the letter combination early on to make it clear. This lesson transcription provides ample evidence in relation to how local and standard varieties of a language dovetail with each other.

isiZulu Home Language Grade 2 lesson (Mamelodi)

This lesson was in many of its features very similar to the previous one, and has therefore not been analysed further in any detail. The goal of the lesson was stated upfront and was to learn the new sound of “mb” in isiZulu. Words were identified and practised through iterative exercises that included individual, whole-group and small-group reading, writing and colouring-in activities. Although a transcription comprising the verbatim isiZulu words used by teachers and learners, their translation into English and an overlay of non-verbal activities is available, it was not considered meaningful to attach in full.

The by now familiar interaction pattern of implicit feedback, teacher-centred initiation of interaction and learner responses overwhelmingly limited to factual single-word or very short responses, was again evident. The cognitive challenge was average, and not so advanced that it would facilitate strong stepping up from BICS to CALP mode. Many learners were often distracted, and their motivation and involvement were at most average. The teacher nevertheless came across as energetic and in control of the progression of the conceptual task and classroom management, and got though a lot of activities and contents in a productive way. Concept attainment by learners is adjudged to have comprised reasonable mastering of the “mb” sound, based mostly on repeated recognition and production of the sound across many modes of activity.

isiZulu Home Language Grade 3 lesson (Soweto)

This lesson too followed the conventional phonics-based approach of the previous two. It has therefore also not been analysed further in any detail. The goal of the lesson was also stated upfront. After revising with learners that the letter combination covered during the previous week was “nhlw”, the goal of the day was introduced as learning the new sound combination of “ntshw” in isiZulu. Words were identified and practised through iterative exercises. These included calling on individual learners quite a lot to make contributions. However, the translator, a senior lecturer at a university, pointed out that many of the identified words were unknown in conventional (or formal?) isiZulu. This could be attributed to the great variation that may be experienced in township varieties. Although a transcription comprising the verbatim isiZulu words used by teachers and learners, their translation into English and an overlay of non-verbal activities is available, it was not considered meaningful to attach it in full.

Besides familiar interaction, cognition and conceptual features, unique elements in this lesson comprised a meta-level motivation to the learners that the number of letters in letter combinations increases with the grade they are completing. Therefore, it was pointed out that they had done two- and three-letter combinations by now, and because they were getting ready to go to Grade 4, they were doing four-letter and even five-letter combinations now. The teacher also spent quite some time still at the end of the lesson during their writing exercise helping them with handwriting, forming letters, working neatly, etc.

One conceptual issue could be how one evaluates appropriate learner experiences and gains in cognition and concepts when faced by such wide differences between isiZulu language varieties. Other than that, at most average levels of teaching and learning practice were observed in relation to interaction management, cognitive challenge and conceptual gain.

5.2.4 Reflection: High-level implications of using our classroom analysis framework

Having in a manner explored the feasibility of using a selected analysis framework in enhancing how we understand language teaching and learning practice on the basis of the classroom observations undertaken as part of this study, some reflection is warranted at this point[53]. The task remains an ongoing one, though.

The validity of the framework has been tested partly through triangulation across additional information sources (classrooms, district support and monitoring, curriculum contents, etc.), further samples of practice, and a variety of research approaches (e.g., those including innovative, "revolutionary" or action-research paradigms). Ways have been pursued for applying closely integrated research or conceptual paradigms simultaneously. In doing so we have tried so far to account for the use of underpinning conceptual frameworks as derived from multiple possible positions, including: non-reductive approaches to content (language subject teaching being treated as mere and confined EFAL or L1 objects); semantic networks in relation to synonyms vis-à-vis collocations; neuro-linguistic perspectives of neural activation in addition to the more obvious view of language enrichment; impressionistic analysis (devoid of overly quantified or mechanistically structured detail dissections); discourse and other analysis on the basis of extended texts (reading aloud of short vs long sentences, the use of closed vs open questions about factual, reasoning and opinion-based interaction, dialogising vs monologic texts inside and outside interventionist teaching and transformative pedagogy, short "problem-solving" texts versus extended texts, etc.); alphabetic versus phonic approaches (related to reading aloud); reading words in (con-)texts using literacy-related cognitive tasks such as scanning; teacher-centred and learner-centred accentuation; and the interlinkage of single words and sentences (and paragraphs).

The ethical concerns about potentially continuing to research the obvious (implying that more refined analyses of obvious (bad) practices continue to be undertaken) should be taken seriously. Three positions, among possibly others, are flagged: (a) the transformative/romantic view with teachers spontaneously serving as agents of change; (b) the deterministic (hegemonic) ideological view where teachers are over-powered; and (c) the Gramscian (hegemonic) multiple-subjectivities ideological view where many conflicting forces operate (inner and outer forces do not automatically / naturally / dialectically move either towards the total acceptance of external authority, neither are they resolved in favour of teacher-led change; instead, the numerous "multiple voices" that make up a teacher's consciousness tend to cancel each other out, leading to a state of confusion, paralysis and alienation).

The interpretations offered so far in this report can (and should) be pushed further on a number of fronts by other scholars. Such areas or elements would include:

- I-R-F and I-R (or I-R-(F)) patterns of interaction: Are these differences in structure pedagogically significant?
- Syntactic elaboration: Is it an outcome of cognitive effort, or learners' linguistic effort, or teacher-led learner imitation?
- Should slight "grammatical errors" be perceived as substantive language error, or as linguistic diversity; and do these differing perceptions lead to a prescriptively-driven or socio-linguistically-driven pedagogy

[53] Based on initial insights produced by Joseph and Ramani after an analysis workshop on 18 May 2012, Pretoria.

respectively? Roodt's (1993) contribution on South African Black English (SABE) is a very valuable on in this regard. Should we proscribe or tolerate, or celebrate deviations / diversity? When the goal is language development and literacy, what is best to focus on: Correcting language "errors", and showing the inappropriacy of "non-standard" varieties for academic literacy purposes; or is it best to focus on developing syntactic elaboration / elaborated code?

- The didactic value of real and pseudo questions: Is there a place for "real questions" in lessons, and if so, which part of a lesson?
- Can teacher talk for "guidance" and "management" be used as "samples" in a language-as-subject class (such as EFAL)?
- What must we do to change teachers' practices? Will Cummins' four quadrants of language proficiency, applied to South African classrooms, help us to map where teachers are "stuck" and where else they should move to? Is the A → C → D route an accurate description of teachers' current stagnation, or is it the quadrant where teachers should be moving to? On the other hand, is the route to pedagogic change best represented by A → B → D rather than A → C → D? How are A → C → D and A → B → D different from each other? Besides, are these mapping of pedagogic routes so closely linked to the paradigm that generated them (Cummins' bilingual language and cognition theory) as to make them impervious and non-neutral to alternative paradigms within this and other research?
- Translanguaging
    a) Is translanguaging: i) just a trendy word that we must tune into to keep up with the latest fashions; ii) is it a mere synonym of code-switching; iii) or is it more than that, perhaps a super-ordinate that is broader but inclusive of code-switching?
    b) Will our hypothesis about code-switching be supported by further data analysis and research by other, namely that code-switching / translanguaging from English to Sepedi by the teacher happens even within a strong English-only policy-driven EFAL classroom, confirming our hypothesis that there must inevitably be an asymmetry between policy and practice, justifying thereby the need for classroom-centred research based on classroom talk? Further, would the research support our view that code-switching in EFAL is likely to occur more within "guidance" and "management" talk, but would tend to be avoided in teacher talk as "sample"? Is it possible that in contrast to content classes this may not be the case?
    c) Does code-switching by the teacher enhance acquisition of the target language (English) or deprive learners of target language input? Will it differ should one select a continua paradigm vis-à-vis a second-language acquisition (SLA) paradigm?
    d) Is the low quantity of code-switching (relative, we hypothesise, to content classes like Mathematics) due to a top-down English-only policy mandated by the DBE, or is it the personal policy of teachers of English? Is it compatible with or contradictory to official LiEP?
- Is the generalisation about safe-talk made in this report valid? Or is this an overgeneralisation based upon a limited and under-representative sample of schools; or worse, an interpretation that springs from a pessimistic view of South African education that ignores wider demographic knowledge and historical trends? If it turns out that our current hypothesis that South African education hasn't changed much in the last 25 years is invalid, should we have to call for a change of perceptions and methodology?
- On the question of agency and resources for change: Are the resources for teacher change/educational transformation internal or external? I.e., are the resources embedded in deviations from routines that teachers themselves unconsciously introduce and which classroom interactional analysts need to discover? Or are teachers so hopelessly caught in over-routinised teaching (either due to reproducing -

out of loyalty - their own former schooling, or else because of deterministic policy-driven pedagogies from above) that only experts from without can rescue them? Assuming the latter, what findings will ethnographic and interventionist-intended research be likely to reveal; that teachers will accept, or invite or resist being rescued?

- What can the neuro-linguistic paradigm: a) contribute to an analysis of classroom data; b) select from analyses done so far which is compatible with their theory of how the brain/mind works; c) suggest as pedagogy that converges with, or else diverges from, such constructivist models as Cummins'?
- How do post-graduate students writing their dissertations cope with the academic community's pressure on them to cite the latest literature in their chosen disciplinary field? Is "the latest is best" attitude a criterion of good scholarly research, or merely a surrender to the fashionable paradigms currently in vogue? And even if it is (a forced surrender), do supervisors nevertheless have to enable students to "play the academic game" to survive in a competitive academic world, while at the same time finding a way to revive good but "old hat" ideas from yesteryears that can be re-presented to look academically respectable - in addition to being *de facto* useful - and perhaps not so out of vogue? Does this issue of "latest publications" versus "old hat" literature possibly conceal a deeper issue: knowledge selection based on an assumedly linear progress of knowledge in the social sciences (akin to the natural sciences) to guide researchers to add yet another bit of knowledge to the latest pile; in contrast with selection based on the view that the social science research literature is a pluralistic and eclectic pool of knowledge (not based upon a definite linear path of progress – as yet!) with an ethically-driven criterion for selection? In other words, would it mean asking: what from the historically built reservoir of knowledge do we need to choose that best helps us to understand what's wrong with our education system; followed by how best can we apply such knowledge to this system to change it for the better? Or more simply, as other scholars may have put it: how can schooling be studied in such a way that the authentic and important needs of learners are not eclipsed?
- Has our knowledge progressed beyond that which Macdonald (1990) produced at the HSRC in 1985? If so, how? Is South African education repeating its past bad practices, or are researchers doing repetitive research without reference to previous and current research projects happening elsewhere in the country?
- Minimum requirements for enhancing the collection and practical value of research data may have to be set and pursued more diligently. These should include: always obtaining formal lesson plans to avoid speculation about explicit or implicit lesson goals; comparing conclusions about learner achievement against ANA and other test results for observed sites.
- Regarding the role played by the curriculum, what will be the outcome when scripted curriculums and lesson plans are used, and when they may be forced to align too closely to international norms with the effect of reducing local context too drastically. Will their value differ between dysfunctional and other schools? How effective is the curriculum training which teachers receive and how do we evaluate that? What is the contribution of effective school managers and especially teachers, irrespective of curriculum changes and contents.

5.3 Teacher attitudes, knowledge and perceptions of school language policy

Information was provided not only by school-management members (principals mainly) about the state of their language policies and related attitudes, knowledge and perceptions related to language, but also by teachers in both Limpopo and Gauteng, either as part of focus-group or individual interview schedules. Because this information contextualises the classroom observations so well, besides providing some direct information that may illuminate analyses relating to the teaching and learning practices that were observed in classrooms, it was decided to place this part of the analysis here. This will make the discussion about

effective and meaningful language policy management in the specific contexts of the schools meaningful, also with a view to any subsequent recommendations about training or interventions aimed at school governing body members, school management staff and teachers.

5.3.1 Limpopo

Analysis of interview data and focus group sessions

This section reports on some of the key insights that emerged from the focus-group discussions and joint video review sessions. There were three one-hour sessions organised with teachers to reflect on different aspects of the research. The first meeting aimed to gather insights from the teachers about their teaching and the principles influencing their teaching, including their views about language and literacy learning. The second session was aimed at dealing with the information for the teacher profiles, namely, their qualifications and teaching experience.

The third was the focus-group discussion involving three teachers who observed all the lessons (regular and intervention lessons) and the two teachers who did the actual teaching in the regular lessons. In addition, three junior researchers from the NRF team were also present. Overall, five regular teachers participated in the interview sessions. It was in this session that the selected videos were jointly viewed and reviewed.

Teacher reflections on both regular and demonstration lessons

When teachers were requested to reflect on both the regular and intervention lessons, the two regular teachers focused initially on phonics. What underscored their reflections was their insecurity with the learners' poor grasp of phonics, and how best they can assist their learners.

Reflecting on the intervention lesson based on the principle of integrated phonics in which the teacher used the learners' names as an entry point into phonics learning, the first teacher outlined her reservation against this model.

> *What I understand is that in first grade the learners are exposed to the Sepedi sounds and English sounds … sometime (in the lesson) you said who can read something on the board …. Those learners can't read English now.*
>
> Teacher C (21 February 2013)

This teacher actually believes that learners at Grade 1 are unable to read and therefore they limit their teaching to focus on individual sounds and words. They have very low expectations of learners and this obviously influences their perceptions of what their learners can and cannot do.

This teacher further commented that:

> *….and again they cannot write it. We don't have the sound [c] in Sepedi as in English; we only have [k]. So, we don't teach the sound early (in Grade 1) … because once you teach them the sound, learners won't be able to differentiate between the two.*
>
> Teacher C (21 February 2013)

The teacher's comment reveals that L1 and L2 should be kept strictly apart and the teaching and learning of the two languages are isolated, separate and discrete processes. She assumes that teaching such letter-sound correspondence across two languages to children is a hindrance to their effective learning of the sound in both L1 and L2. The underlying assumption is the teacher's belief that the learning of L2 interferes with the development of L1 resulting in confusion for the learners.

To avoid the complications associated with variations in sound-letter correspondence, the teachers do not let the children engage in writing activities in Grade 1. In this regard, the teacher said: *"……So that is why at the first term, they don't write. We usually do it orally."*

The reality, however, is that bilingual children mix languages, which is not due to genuine confusion, but to their ability to use all their languages as resources. In fact, in writing their names on the board, the children used the letters "c" and "k" correctly. However, teachers tend to ignore this kind of evidence and adhere to their rigid views about what should and should not be done in teaching learners about sound-letter correspondence. The fact that these children are already using these sounds and letters as part of their language repertoire is not recognised. It is obvious that much deeper discussion of this issue and more interventions are called for to enable teachers to shift their views.

This teacher also criticised the intervention teachers for not writing within the lines that were on the board and for not training the learners to stay within these lines when they invited them to write on the board. This was seen as a serious shortcoming in the intervention teachers' approach to the teaching and learning of writing. The teacher argued persistently that in earlier grades, emphasis ought to be on getting the learners to write between the lines, which are an argument that has been heavily criticised by the emergent literacy paradigm. This suggests that in the view of some teachers, literacy is brought about by mastery of the technical aspects of writing[54] such as correct size and shape of letters, spelling, punctuation and neat handwriting.

Such a technicist approach has the potential to not only suppress engagement with literacy as a meaningful practice, but it misses the point about the value of writing as a reflective, metacognitive tool (Bearne, 2007). This suggests that ideologies about mechanical processes of literacy are entrenched in teachers' practice, and therefore they have to be convinced of the importance of developing writers rather than just teaching the skills of writing (Bearne 2007) in their literacy-teaching approaches.

On the positive side, the regular teachers were full of praise for the Sepedi intervention lessons, for the facilitator's ability to engage learners in writing extended and elaborate texts. The teacher's interpretation of the learners' writing was still within a form-focused view of language, however, as she further continued by saying:

> *My children … they now know that a paragraph is made up of sentences. After writing a paragraph you start a new sentence with a capital letter … the use of commas and more importantly that a paragraph must have a heading. They also learned that a story must have the main idea.*
>
> Teacher B (21 February, 2013)

Though the teacher seemed to acknowledge the importance of the conventions of writing like commas, fullstops and both small letters and capitals where they belong, she also made a profound remark about the importance of allowing learners to engage in ideas, both orally and through writing in literacy learning.

The same teacher also said quite reflectively:

[54] Attention was also drawn by one of the external readers of the manuscript to the fact that a distinction is made in the FP between *handwriting* and *writing* and that teachers of Grade 1 and 2 learners, especially the latter, are supposed to accommodate this in their weekly lesson plans. The teachers here seem to be equating writing with handwriting. This perhaps points to a lack of familiarity with the curriculum and a failure to distinguish between procedural knowledge (gaining control over fine motor coordination, learning how to form letters and words) and other kinds of knowledge (linguistic/textual, e.g., the purpose of writing, what a paragraph is, how to express something).

What I noticed was … you were so patient. You tried to involve all the learners. You were interested in all the learners to take part in your lesson (sic) to ensure that learners understand … and if there are learners who don't understand, you made things simpler, you made it simpler for them to understand. That's what I noted … and that what I learnt from you … and that's what I want to practice.

Interview data (21 Feb, 2013)

This teacher's reflection about this aspect of the intervention lesson suggests that the teacher's principles underlying her teaching have evolved somewhat, and she wished to experiment with some of the pedagogic practices demonstrated in the intervention lesson. When asked about what aspect of the intervention lessons they would most likely adopt, the teachers noted that they have learned that writing "need not be delayed" to the second or third quarter, and they will definitely seek to bring forward the teaching of writing. This may be seen as a very positive outcome of the intervention lessons.

Teacher experience in the use of classroom materials

During the focus-group and joint discussion sessions, there was a general consensus among the teachers that the current books they are using for the FP are not adequate and not satisfactorily designed, and therefore not appropriate in the FP. One teacher remarked that:

As educators we have no materials. Let's say the reading books … like now, we depend on the green books which are supplied by the government. Those are the only books we have … No reading books! In that book it is just activities …. There is no material you can give to a child and say read this and explain what is happening in this story. So, learners end up not being able to relate (sic) a story, because they have never read [an extended piece of writing before].

Teacher F (22 May, 2013)

According to the teachers, the current workbooks provide few opportunities for reading for pleasure. At the heart of the teachers' dissatisfaction with the current workbooks is the design of the workbooks, which the teachers outlined as a structured set of activities, with each activity covering a two-page spread. This was intended to provide work for one or two lessons but could take between a day or two, or up to a week to satisfactorily finish.

The teachers questioned whether the content has to be covered in the prescribed order, since there are pre-set weekly activities for each week, month and the quarter. This teacher's argument seems to reflect their collective understanding that learning is not only about "planned" activities, and emphasised the need for flexibility to enable teachers to work at their own pace depending on the classroom conditions.

In addition to the above teacher remark, one of the teachers decried the burden of having to contend with materials which are poorly designed, which is further compounded by the fact that they (teachers) have received little training on how to use those materials, including workbooks. She noted that:

There are too many people outside classrooms telling teachers and educators what they need to teach in their classrooms … They order … they tell us what to teach … when to teach … and how to teach! We teach it, whether we think it is the right material to teach or not, we have to teach it.

Teacher F (11th Feb 2013)

More profoundly, one teacher argued that current materials being used limit their ability to creatively carry out their jobs, because they have to meet their weekly targets, and have little time to generate sufficient materials to compensate for what they consider as "design flaws" of the current materials. This also highlights the mismatches between teachers (as practitioners) and material developers, over a range of

challenges to teachers with regards to the underlying assumptions, expectations and goals of the learning process. This is clearly evident in the mismatch between what teachers consider relevant for their teaching as opposed to those that material developers and policy makers consider educationally appropriate.[55]

Teachers' beliefs about the pedagogic significance of code switching

For many bilingual teachers, especially those speaking English and an African language, the unintended creeping of elements of one language into another is very common in their linguistic repertoire. Teachers reported that they code-switch for various purposes, for instance, when they cannot find an appropriate expression or word in the target language.

When confronted about their code-switching practices in the classroom, they however argued that instead of code-switching, they ought to paraphrase, and reformulate challenging questions. The teachers insisted that learners have to be challenged, as opposed to the usual "dumbing down" as a result of excessive code-switching in EFAL lessons. A teacher without knowledge of the learners' L1 (possibly referring to the EFAL intervention teacher) was able to get the learners to engage in challenging tasks without code-switching. The basis for the teacher's criticism of code-switching was, however, based on a concern for linguistic purism; they asserted that only English should be used in the EFAL lessons and instruction has to be only in English.

Asked about the pedagogic significance of code-switching in their teaching, and whether CAPS permits the use of code-switching, the teachers seemed to lack clarity. One of the teachers responded by noting that they would mostly encourage other teachers to rather simplify by reformulating instructions or paraphrase when learners have difficulty in understanding instructions in English. Embedded in this argument was the belief that the continued use of Sepedi in English lessons has the potential to destroy children's motivation to learn English, *"because they (learners) can easily rely on teacher's code switching"* (*Teacher B during interview*).

In fact one of the teachers asserted that *"we work with children from difficult backgrounds, where there is little English or writing; we therefore have to make sure that the learners speak and write repeatedly"* (Interview data, 11 Feb 2013).

This suggests that teachers view routines such as repetition as key in dealing with children's needs. These understandings have their origin in teachers' beliefs, and are embedded in their practice, and outlook. Inevitably, dominant theories of the past (such as rote-learning for automatisation) continue to operate as the default framework affecting and driving current practices and perspectives.

[55] It would be fair, though, to contextualise the abovementioned findings on teacher perceptions against some broader issues. A first one concerns the availability and use of classroom materials against locus of control issues. For instance, when teachers "blame" the DBE for the lack of resources or inappropriate resources, it is also a matter of resource management as an enabling condition for effective learning/teaching. Many teachers are unaware that they (through their HoDs and schools) can order readers each year as part of the LTSM budget at their school. Many schools are given such resources which they do not utilise. The PIRLS 2006 study (Howie et al., 2007) found that resource management at schools impacted on literacy performance. A second observation concerns the pacing of learning. Are teachers mindful of the effects of pacing on literacy performance? One of the reasons for CAPS being so closely scripted was because teaching was structured too loosely and pacing was too slow, due mainly to the low expectations set by former curriculum versions for teachers, and teachers for their learners.

Teachers' understanding of assessment

When asked about some of the recent systematic and international studies currently being done in the country to measure educational quality, and administration of education in the country, teachers only seemed to be aware of the Annual National Assessment (ANA). When further probed about the central findings of the reports, and their views about the administration of the ANA tests, the teachers argued that learners were not given sufficient time to complete their tests. They also seemed more focused on the administration of the test than on its value as a diagnostic tool. This was an important consideration in the light of the DBE's view (Department of Education, 2012) that assessment exercises such as ANA were about holding schools (and teachers) accountable for their results, and tracking changes in performance.

Arguably, because teachers administer the ANA tests and are involved in marking them, the DBE envisages that such teachers will be exposed to good testing practices and appropriate standards leading to internally-driven changes in classroom practice. The DBE expects that teachers can also see, at first hand, the strengths and weaknesses of their learners, and hence come to understand the efficacy of their own teaching. The legitimate expectations on teachers could therefore be that the content and focus of the classes ought to be informed by their school-based analysis of the ANA scores and performance of learners. Such an analysis could then be used to bring about change in the teaching of reading and writing and other competencies. This, however, cannot take place, if little meaningful reflection on the ANA results occurs in schools.

Teachers' views about current teacher training models

It emerged during the focus-group discussion that the teachers think that the "current workshop model" of teacher support is not sufficient. The basis of the teachers' view is the belief that workshops don't actually teach teachers how to actually go about the business of teaching the (new) curriculum, which is essential for teacher professional development. The workshop model they referred to tends to be mostly in the form of one-to three-day workshops at district level to train teachers. Traditionally, the lack of success of any curricular innovation is generally attributed to the failure of the teachers to implement curricular innovations in tune with the intentions of the developers. This approach is misleading; at best it assumes that the teacher's goals are more or less similar to those of experts, policy makers and developers of teaching and learning workbooks.

Current understanding of teacher professional development shows that for meaningful change in the classroom, curricular innovations have to be embraced by teachers first, rather than imposed upon teachers. Put differently, the complexity of the factors impacting learning and teaching suggests that the most effective forms of teacher empowerment occur when the teacher is seen as an autonomous professional, rather than subordinate to external authority and the expertise (of experts).

This means there is a dire need to engage teachers as agents of educational reform, which is in stark contrast to the current view of teachers as "curriculum implementers".

In this regard, the teachers reported that they had in fact received CAPS training, lasting over three days. Though they value such experiences, they argue that such training seem to be centred on administrative aspects of the curriculum, rather than on essential strategies for teachers to use in their classrooms. The workshop approach seems to fail to acknowledge that teachers' understanding of learning is not simply acquired as knowledge that is put into practice; rather, they develop over time and in diverse contexts working with diverse students, based on on-going experience and reflection.

Language proficiency mismatch between learners and teachers

Generally, teachers' assumptions about the proficiency of their learners manifest through their own practices, that is, through the questions they ask their learners and the kind of activities they get their learners to do (including their reflections based on the teaching of others). This represents what teachers consider age-appropriate to their learners, and thus influence their pedagogic practices.

In one of the reflection sessions based on an English intervention lesson in Grade 1, when the teacher was asked why the learners could not write a word starting with the sound [c], the teacher insisted that she hasn't began teaching her learners the sound because of her insecurities, among others, that the learners will start confusing the sound [c] with the Sepedi [k], which sounds the same in selected words in Sepedi. This argument ignores that there are learners whose names already have the sound, and thus already have the sound in their linguistic repertoire.

Generally, when teachers were confronted about what informs what they do in the classroom, they insist that their classroom practices are consistent with the CAPS' expectations[56] of them. However, a review of the contrast between pedagogic practices in the regular lessons and intervention lessons shows that teachers are teaching at a far lower conceptual level than the learners actually are at. In the regular lessons, teachers predominantly engaged learners in ritualistic and routinised tasks centred around rhythmic chanting, reading out words and texts without much focus on understanding. This kind of practice takes little account of what learners are able to do, and the skills they bring to classroom. Teachers thus miss opportunities to cumulatively build on learners' key competencies.

In the intervention lesson, learners have shown to have developed sophisticated mastery of the oral and narrative genre, and thus could individually read texts without aid in Sepedi and to some extent in English. The learners could also read well beyond word level, and thus be drawn into processes of coding meaning in texts, as was demonstrated in the Sepedi intervention lessons. This observation points to the reality that teachers in the regular lessons were operating at a very basic level, and were unable to conceptualise age-appropriate pedagogic practices in line with the linguistic proficiencies of their learners.

5.3.2 Gauteng

Attitudes, knowledge and perceptions about language teaching in general

Teachers indicated that they were formally trained in all curriculum contents (for all FP subjects), especially after changes to the curriculum took place. For Gauteng that included CAPS, its predecessor NCS and the unique parallel GPL(N/M)S). CAPS / NCS training reportedly occurred every year so far in workshops of one to three days (in one case seven days) every year. It was aimed mainly at annual revisions, lesson plans, reporting and assessment requirements, learners' reading sheets, assessment guidelines, teacher's notes, new terminology, time allocations, management notes and curriculum management, with very little focus on subject contents and knowledge. For GPL(N/M)S, training was received every semester since its inception in the form of monthly or bi-monthly support visits, often for two to four or five days at a time. These focused most on subject contents and pedagogy. It has to be remembered that Mathematics and languages share these efforts. It was mentioned specifically by some teachers that training also covered policy documents, how to conduct assessments, teaching plans, curriculum coverage, supplementary

[56] The scope of the study did not allow intensive document analysis on the basis of repeated visits and deeper probing of teachers' claimed curriculum compliance. Their suspected more tenuous familiarity with finer CAPS details remains untested, therefore.

documents and how to follow the curriculum policy / national protocol, which are all integrated with assessment.

Teachers' perceptions about the status, problems and solutions related to literacy and language teaching and learning in the early school years were explored next. Responses varied from being firm that literacy meant reading fluently at the end of Grade 3, an ability that should belong to every individual learner, to being more tentative, indicating that learners should recognise (decode?) phonemes / sounds to such an extent that they will be able to put them together to pronounce a word in the end (without any reference to fluency across whole sentences). One teacher indicated that fluency should definitely apply to the first language, while a few writing mistakes in English as FAL at the end of Grade 3 would still be excusable. Another teacher emphasised the ability to read for information by then, with comprehension, in both languages (EFAL and HL). Writing ability should also be very high ("98%"), according to this teacher, although she acknowledged that learners differ and not all of them reach that goal.

Teachers' understanding of the best way/s to teach literacy included the following: learners knowing the sound/s (phonemes/phonics) and being able to successively built up words, sentences, and paragraphs from them; learners knowing the written forms (graphemes) too, that is, be able to encode / decode; teachers transferring phonetic (word-)attack skills[57] / awareness to learners; teachers using teaching aids and charts, flash cards, phonics charts and pictures, also in group work, where learners work in groups, pairs and sometimes individually, with the tasks based on learners' abilities; using demonstration and practical lessons; using as many resources and objects as possible, such as charts, (large) word cards, other support materials (LTSM), bright materials, exciting activities (actions, gestures), coding of meaning through colour, underscoring, etc., all in relation to the focus of the lesson (i.e., end or beginning letter combinations, plurals, past tense, etc., according to which core or previous knowledge remains in black / white text, and new knowledge appears in colour, or other highlighting formats); following the latest methodologies taught through GPLMS; and raising learners' awareness by concentrating on how sentences are built out of words with sounds/letters.

Teachers themselves reported an array of training in any of the following: phonics, the alphabetical principle, phoneme-grapheme (en)coding and decoding, grammar, pronunciation, phonetics, syllables and blends, linguistics, reading, writing, parts of speech, listening and speaking skills, the typical or regular combinations between vowels and consonants, and practical classroom techniques, including a mixture of whole-language, communication and structured/-al approaches. The GPLMS's focus on phonics was supported by them.

On the matter of learners' relative reading and writing proficiency in their African home language(s) and English, teachers were at one that the mother tongue is what they're better in. A substantive reason behind this is seen as the parental support they can receive at home, and the congruence between the home and school environments' language resources. A growing proportion of learners do arrive at schools nowadays with some sound English proficiency, a signal that parents who are able to try to empower them for the LoLT switch that they know is coming at the end of Grade 3. Learners proficient in the mother tongue were considered to be proficient in English too (generally, but not necessarily). An explanation offered was that some languages bridged better to English. It was sometimes considered to be related to mental or general

[57] According to a possible definition of Word Attack Skills such as the one by Amanda Morin: "Skills needed to be able to make sense of an unknown word in the context of reading. Word attack skills rely on the ability to recognize the sounds that make up words and to put those sounds together (phonemic awareness). More advanced word attack skills involve using context, prefixes or suffixes or a dictionary to determine what a word means." It is also known as decoding skills. (http://childparenting.about.com/od/schoollearning/a/word-attack-skills-def.htm; 21 Aug 2013)

language ability. One teacher observed that such bilingual children would then do well in all their subjects. While for some learners their English-speaking skills were often considered to be quite good, it would not (yet) apply to their reading and writing skills.

Some teachers were aware of the use of large-scale comparative assessments such as PIRLS and the Programme for International Student Assessment (PISA), without really knowing more about what they (can) tell them about their learners' proficiency. They knew more about ANA (still rather new at the time), but not necessarily about its role and value, though. One teacher thought that giving the government feedback about how well learners are doing or coping, or what they struggle with, or whether or not they're improving, is a good thing. However, no mention was made of the formative assessment benefits to individual teachers, and ANA being designed to let them know which of their own learners are having difficulty with which parts of the work, and how to adjust their teaching accordingly.

Teachers considered their personal contributions (or strategy) to improve literacy and language teaching to comprise of the following elements: getting parents involved; improving supervision of homework; reducing class sizes; avoiding the problem of overaged learners in a grade; not allowing foundational knowledge ever to fall behind (by pursuing an early and strong start and maintaining the impetus); identifying learners requiring individual remedial attention early; including more oral activities and incorporating art and culture to help learners express themselves better; getting learners to draw what they hear to enable the teacher to know what they understand; receiving more practical lesson demonstrations; bringing specialists to schools to help and coach teachers; adhering to contact time; preparing well for every lesson; having and using a wide range of LTSM; receiving incentives for any excellent achievement (including salary adjustments); learning from those (comparable) countries which excel, or managed to make dramatic changes; and sticking to the same curriculum and system for much longer periods (by improving on it only gradually later, but not remaking it ever so often).

GPLMS was considered difficult by some to implement, especially fitting the designated work into the 10-minute sub-slots. This requires that a teacher always just have to move on. A teacher and some colleagues felt they often needed to repeat a piece of teaching. It was acknowledged that the DBE nowadays made more good resources available, which teachers enjoyed bringing together in their work.

The extent to which teachers considered having appropriate resources and related conditions in their schools in support of their teaching (classroom practice) was in fact also explored more deeply. Mobile, school and classroom libraries (or trolleys) were perceived to be in good supply. If not close at hand (in an isolated case), teachers often exchanged materials between themselves. In most schools learners can take books home with support from their parents in monitoring learner assignments and looking after and signing for the materials. Home-language materials are becoming more and more available too. Learners benefit in terms of fluency, vocabulary and comprehension in this regard. Excursions to other libraries, and engaging in reading and speaking competitions were also available to the learners of one of the schools. Reading for leisure is widely encouraged to develop a culture of reading. Teachers would appreciate (any) support from their communities, especially favouring universities and their students, who are considered to be strong role models to the children. Reading groups are considered an ideal platform. Groups led by parents were also welcome. Readers and story books in the African home languages were available, and learners enjoyed them. In some cases there were not enough such books to satisfy all the school's teaching, learning and reading needs, though.

Teacher's teaching practices were interrogated a bit more. They preferred to use open-ended questions and understood their value in terms of making learners think and argue for themselves and about the

causes behind things, in order to develop a broad mind while not only thinking about the obvious. This in itself was considered to create much excitement, interest and motivation in class and about the work. There were also clear benefits in relation to their confidence and openness to experience, as well as accepting that it is not catastrophic to get answers wrong from time to time. (It has to be noted that the lesson observations contradict the foregoing, and it is plausible that teachers know the ideal situation, but struggle in practice to give effect to it under hectic operational conditions.)

Teachers had few reservations about code-switching (during English lessons or lessons in English). Their rationale was that the mother tongue always speaks to the heart. Teachers used code-switching when learners did not understand the English at all, a new activity or instruction was introduced, or to point out the equivalent concept or vocabulary from the mother tongue in order to make the new English word immediately clear. Pictures were seen as a very good alternative or aid under these circumstances. CAPS was broadly considered to have become slightly more lenient than NCS and GPLMS before it in this regard.

Teachers declared themselves in alignment with what CAPS (quite tightly) structures them to teach, content- and methodology-wise. This included group work, using textbooks, workbooks and other self-developed and -collected resources (newspapers, magazines, photos, etc.), and having learners write on the chalkboard. Group work was considered to help learners share materials and solutions, gain confidence in speaking, and work in teams. The use of pictures were pursued and supported as that aroused learner interest, jogged memory, created a sense of drama, elicited learner involvement and thinking, and helped explain content effectively.

The pressure to complete the syllabus was experienced as extremely strong. To the question: “Is there any pressure on you to complete the syllabus / textbook?”, answers such as “YES, YES, YES” and “Lots” were typical. In cases where learners stayed close to school, teachers rather arranged extra lessons for them than to fall behind in class. “You cannot not cover the scheduled work” in school time. However, many felt that it would be better to allow teachers to complete difficult work before moving on; else, it scared off and compromised both the teacher and the learners, who feared that they would be caught out having moved on without having gained their learning objectives. The point of truth is going to come with the ANA results. Should catching up lost work become necessary for some reason, everything is squeezed even more.

Teachers considered their ideal learner as those ones who grasped instructions quickly, were interested in the work, and were “curious”, “bright”, “clever” and “smart. This made teachers’ work easier as they often helped with the “slow” learners. A secret that teachers should be aware of is that with the right approach, the teacher can “create” these kinds of learners for the class, instead of just accepting that some will never be like that, or expecting almost all of them not to come to school being like that. One teacher used the technique of calling such children “Ms X” (her own name) and hoped to lure them into the teaching profession in this way, even. Those having an array of different types of skills, especially good listening and reading skills, and the ability to write, were also considered ideal, along with being able to communicate well in the class with the teacher and other learners.

What teachers found especially fulfilling of teaching is to realise every year that the shy, “mute” and scared Grade 1s of eight months before can read and write fluently by September. They also become the eager learners who always ask for more reading material. Relating the previous information was sufficiently valuable for the teacher to let her become emotional about this wonder of transformation and the satisfaction it gave her. Listening to learners and having them speak and tell stories were fulfilling to another. So was enabling everyone to practice their confidence and ability. These latter two elements formed a strong part of individual diagnostics, that is, formal assessment, for the teacher reporting that.

Always getting more information for lessons, being updated, and being able to teach that to learners were another teacher's highlights. "The enjoyment of teaching an African child in the hope of making the country better" was very valuable to another. So was experiencing one's own passion about teaching children for someone. One teacher, though, showed an utter sense of being overwhelmed by this career, which had tired her out by being such an endless pursuit.

Discipline in classrooms was clearly a huge limiting factor. It was considered to be very problematic and the main problem. Pictures were portrayed of learners screaming and shouting uncontrollably, and noise levels being extreme. Many learners are rude and ill-disciplined; a situation that they are deemed to bring from home. They were described as disruptive / distracting, and exercising attention-seeking behaviour at school because they don't find that at home, even be getting themselves into trouble on purpose or acting as the class clown to at least have an appreciative classroom audience while standing on a chair in the corner. Large classes were described as very tiresome. The obligation to attend to slow or weaker learners made it impossible for teachers to manage the whole class well all the time. This led to a great sense of helplessness and frustration. The latter was mainly linked to not being able to connect with every learner and give them enough individual attention. Punishment options available also did not scare anyone off any longer. One teacher called for a workshop on this[58]. One teacher mentioned that it was those learners who couldn't do the work who became ill-disciplined.

Teachers' ideal class size ranged from 25 ("that would be heaven") to 30 to 35 as ideal / the maximum. The advantages of smaller classes, below the 45 to 50 often encountered here, in relation to usable and available space would be tremendous. It would also reduce noise levels, make it easier to organise group work, and facilitate the sufficiency and handling of LTSM.

The following key conclusions, reached on the basis of the final debriefing sessions with the observed teachers, perhaps integrate the teacher-level concerns and findings on classroom teaching practice best:

- Equivalence between the languages spoken at home by parents, other caregivers and learners, on the one hand, and the medium of instruction and teachers' home language, vary across schools. This has different impacts on classroom interaction in each case.
- The extent of overlap between teachers' major subjects during their teacher training and the subjects and levels they are currently required to teach at school modifies the first outcome mentioned above.
- Most, if not all, teachers find it difficult to integrate the various curriculum coverage and time requirements of NCS/CAPS and the GPLMS. The situation is complicated by frequent changes from above.
- The volume of direct literacy engagement per lesson (what we came to call literacy events characterised by intensive individual learner interaction with text, either by reading or writing) is often rather low, broadly speaking. This partly results from group activity taking preference over deep individual engagement.
- Less than optimal integration between classroom (and especially chalkboard) management and the teaching of lesson content seems to detract from the value of teaching in some cases.

[58] These teacher responses on discipline in classrooms beg the question whether or not competencies such as the effective management of classroom routines and the development of self-regulation in learners are sufficient components of current teacher training/development. Since these are enabling conditions for learning, they should be included especially for prospective FP teachers, if not already. Findings from analysis of learner errors in a spelling test earlier related these errors to chalkboard management, further supporting the need for structured training, as voiced by a teacher.

- The creative and optimal use of learning materials and other resources varies across classrooms, and is not always thought out and planned as well as it could be.
- Uncertainty exists about the permissibility and value of code-switching where learners do not follow the English. (A new focus on using every available learner resource in multiply complex language encounters is gaining ground internationally.)
- The many anomalies between standard and local varieties of African languages leave teachers uncertain about their choices and options.
- Integrating the bigger context of language teaching theories and methodologies, local (suburb/township), regional (city and province) and national circumstances and needs, and language policy and practice, broadly taken, with day-to-day teaching remains the next challenge.

Language in Education Policy and language teaching in classrooms

The normal configuration for the use of languages as subjects and languages as medium of instruction in the sample schools was to have the most prevalent African language spoken in the nearby community as official language of learning and teaching from Grade 1 to Grade 3, after which it became English (from Grade 4 onwards), while all languages were also taught as subjects. The African language was exclusively Sepedi in the Limpopo schools, isiZulu in one Gauteng school (from Soweto), and, because of the demographics in the community around the two other Gauteng schools (from Mamelodi), both isiZulu and Sepedi. Therefore, in the FP these African languages served as languages of learning and teaching, while being presented in all the other grades as first language (L1) subjects. In the two Mamelodi schools separate classes were filled in accordance with learners' strongest HL or individual mother tongue. English served as LoLT from Grade 4 to 7, and was taught as FAL subject in all the grades. The teacher from one school related that the policy there was to teach Life Skills in English already from Grade 3 to expose learners more to the second language.

Teachers experienced and followed the specified policy as a rather rigid requirement, and stuck to its determinations, including the avoidance of practices such as code-switching but for minimal and really necessary exceptions. Learners were often requested, albeit informally, to explain difficult learning contents or tasks to each other in their own language/s when it became clear to the teacher that they did not follow the English. In one case it implied that the teacher called an older sibling or a Grade 7 learner occasionally to come and help, especially at the beginning of a year. There was the single exception where a teacher considered code-switching openly as a very necessary tool or approach, and also thought that CAPS had become more lenient on the matter anyway.

Although some teachers knew that their schools had an explicit language policy, and had a copy of it which they could show the researchers, one teacher did not know if the school had it, while another told the researchers that it did not exist at her school. The latter is an unlikely possibility, as every school in terms of legal requirements has to make and document some kind of decision about its admission and teaching policy. With the exception of the teacher who said she did not know this information, the other teachers recalled and knew that it had been developed quite a while before through joint effort from the school management team and government body, most likely on the basis of a broad template provided by DBE. This policy was updated every time that curriculum changes had occurred. It was considered fit for purpose, and being implemented fully as intended, by only one teacher. However, its effectiveness in bringing about the desired outcomes was doubted by the remaining teachers. The main concern was that implementing the specified time allocations did not give learners sufficient proficiency in English to master their work through English from Grade 4 onwards, and therefore to use it "across the curriculum". The

period at the beginning of Grade 4 is considered really problematic, although learners "later settle" again. An accompanying problem is getting used to a completely new teacher then as well. One teacher commented that the articulation in CAPS between Grade 3 and Grade 4 in relation to work progression is an improvement from before. She also mentioned that the switch to English at this point has value in that it offers rapid entry into the new technical terminology (academic language proficiency?) encountered in all the new across-the-curriculum subjects and work. Learners who had already been put by their parents in English-medium Grade R facilities outside the school were said to be in a much better position, although they may struggle in Grade 1 still. One teacher called for using the home language of learners as medium of instruction up to and including Grade 7. Bamgbose (2004) supports this argument for African children.

Teachers, as confirmed largely by the sections on teacher profiles (5.1.2 and 5.2.2), reflect and fit the demographics of the community well. This facilitates congruence between learners and teachers, as well as home and classroom contexts, which simplifies and facilitates communication not only in relation to learning contents but also functionally in and around the classroom.

The languages that learners are exposed to in the community and home context largely overlap with the picture portrayed before. It is mostly Sepedi, or isiZulu, or in one area a blend between the two. However, communities are changing, and in certain pockets learners do not conform to such general demographics. It was mentioned in the case of one such school, which happened to have a reasonably good reputation in terms of facilities, discipline, functionality and teaching quality, that parents insisted on placing their children there, even though their mother tongues were not Sepedi or isiZulu. Such isiXhosa-, Xitsonga- or "Shona"-speaking children could then only be addressed in English as the single common language between the learners and the teacher. In another area, a spattering of Sesotho-speaking parents occurred. However, they were quite few and the other parent often spoke the prevalent language. The presence of Portuguese as home language was also observed more and more, though very isolated still. There was also a growing group of homes in which English was becoming a strong second language.

Various recent contributions in literature have put the abovementioned observations in perspective, both in relation to summarising key elements related to the latest policy developments in South Africa, but also making some projections as to what the future may hold, and what has to receive urgent attention (Heugh, 2013b). One such matter (highlighted by Heugh) is bringing the intentions of multilingual policy and multilingual realities in complex classrooms closer to each other. Another is portraying implementation dilemmas and challenges from the urban and rural perspectives of Uganda (Altinyelken, Moorcroft & Van der Draai, 2014). These authors' study confirmed that the use of local languages as mediums of instruction had contributed to the improvement of learners' literacy skills. Vermeulen (2001) reported the perceptions of a small sample of teachers from South-Gauteng about issues around the LoLT. Finally, Jordaan (2011) foregrounds the dire consequences that neglecting the role of language in education in South Africa is having for learner achievement. She indicates more attention to this matter in curriculum implementation and teacher-training programmes as some of the solutions required. The theoretical constructs of Cummins (the distinction between social and academic language in particular), social constructivism, and content and language integrated learning (CLIL) are accepted by her as sound conceptual foundations for basing the policy and practice influences on, that she also advocates.

In closing, in shifting focus from the abovementioned teacher perspectives (Section 5.3 as a whole) about ailments and solutions pertaining to literacy and language teaching (and learning) to the national policy question about what our "method-discourse" in relation to teacher proficiency improvement should be, we should remind ourselves again of the discussion presented right at the end of Chapter 3. The choice

between either a revolutionary or an evolutionary[59] course, or some blend of both, has not been made formally, officially or sentrally, in many ways. It is hoped that the findings presented now (Chapter 5), standing on the foundations of the preceding introduction of paradigms and conceptual or analytical frameworks (Chapters 2 and 3 mainly), have provided the context making the subsequent integration of conclusions, implications and implications hereafter (in Chapter 6) very meaningful.

[59] The distinction between revolutionary and evolutionary approaches to teacher change requires further contextualisation and debate, also in consideration of situation-specific reasons and validations for it. Linking the matter to notions of teacher knowledge (content, pedagogic, and curriculum), or chronic failures within the education system, should prove very meaningful. In the latter sense, for instance, schools may require different approaches depending on their ANA performance levels in literacy or numeracy, should these either be below 40% or above 50%.

Chapter 6: Synthesis and conclusion

In this chapter, the main findings from the study are summarised and their implications are reflected on. In addition, recommendations are formulated on the basis of the foregoing, after which some limitations and gaps, and also some strengths, are identified as part of a final reflection about the work accomplished.

A brief recap reminds the reader that a multi-disciplinary team embarked on a multi-year journey with the task of addressing the problem of teacher-learner interactions in language lessons seemingly not equipping our learners with sufficient language and literacy skills. This situation's outcomes manifest in low learner achievement across subjects from early in the primary school. Gaps in foundational knowledge and academic proficiencies subsequently continue to hamper learners. Literacy and language acquisition and development by learners in both their home and first additional language continue to be compromised across vast swathes of South African schooling. As education managers, researchers, practitioners, parents and other stakeholders we need to know more about how theoretical and conceptual foundations (paradigms) of language teaching and learning, teachers' training in the pedagogical skills and the didactics needed for the abovementioned, and the practical dimensions of classroom interaction work together, or fail to do so, to benefit the learner. Many questions have remained unanswered thus far about the optimal implementation of language-in-education policy within the context of the obligatory switch by learners from the use of an African home language as medium of instruction to that of another language, mostly English, offered as first additional language, for official learning and teaching after the end of Grade 3.

Specific methodological objectives were incorporated into the journey in pursuit of the aims and goals of the study. These objectives were aimed at gaining clarity about components such as the most appropriate conceptual analysis framework to use in the endeavour, the role that paradigms and conceptual frameworks play during research and classroom practice, and what the sample unit should be. The overall aim of the study was to determine the effect of the relation between language acquisition and development paradigms (approaches) and daily teaching and learning classroom practices (interactions) on learners' actual language and literacy development (or achievement). Specific research questions were if and how paradigms and practices interacted, and how and why such interactions determined language learning outcomes. A part of the research deliberately comprised innovation and intervention aimed at determining teachers' openness to self-development.

6.1 Conclusions and synthesis of findings

A number of findings speak to pedagogy; how teachers conduct themselves during teaching on a daily basis during language lessons. These are summarised first, and relate to topics such as the dominance of safe-talk and oracy, and the epistemological, conceptual and cognitive engagement of learners and neglecting, or not valuing, their input. A number of other findings are then grouped together because they relate closely to teacher professionalism, and how that is related to the curriculum and the role of teacher training and development in the matter. A determination is made in the process about how open teachers are to change when confronted with alternative classroom practice/s by witnessing demonstration, innovation or intervention lessons. Some responses are given to the question about the role of teacher training vis-à-vis teacher development in improving language teaching practice. Another component will be the extent to which inflexible interpretation of the curriculum (CAPS) undermine innovative and reflective teacher practice.

6.1.1 Epistemological impoverishment of classroom engagements

The study has revealed that teachers overwhelmingly depend on traditional methods of teaching as marked by repetitions, rote learning and chorusing and as such, the nature of interactions in classroom is predominantly teacher-centred. These localised pedagogic practices make little epistemological contribution to learners' understanding of concepts (their conceptual development), and also do not meaningfully develop learners in terms of literacy skills. One way of characterising what is happening is to conclude that teachers adhere to a linguistic deficit view of learners, especially in the home language. The transcription data point to a consistent pattern observable across HL and EFAL lessons, showing that learning and teaching is occurring at a level far below learners' linguistic and cognitive capacities. Even when learners engage in reading exercises, they are mostly dealt with at superficial level. Learners do not have opportunities to engage in reading as a meaning-making activity. In retrospect, the lessons captured by Transcripts 1, 2 and 3 show that little conceptual development is taking place because the kind of teaching does not enable learners to cross the bridge from everyday knowledge to academic literacy skills.

This continued reliance on traditional approaches by teachers can be conceptualised as a lack of theoretical understanding of the learning process, and to some extent, limited understanding of (and exposure to) current literature on learning and teaching.

A review of current teacher practices (as evidenced by the transcripts) has shown that teachers view reading as a mechanical process, and narrowly as a process of verbalising texts, with little consideration for meaning. As seen in the lesson transcripts, teachers are more interested in how learners articulate, pronounce and recall words they have encountered in texts through dictation and spelling tests. This means learners are unlikely to develop an understanding of the structure of language and text-making. The overwhelming focus on discrete skills (as evidenced in Transcripts 2 and 3) also suggests that there is inflexibility in the way teachers interpret and operationalise the CAPS policy.

The evidence produced by the current study shows that we can confidently assert a number of things with regard to teachers' classroom practices, as evident in the next three sub-sections.

6.1.2 Predominance of safe-talk in the classroom

The cumulative effect of having predominantly rote learning and low-order classroom practices characterise what Hornberger and Chick (2001) refer to as "safe-talk". Hornberger and Chick (2001) defines safe-talk as an interaction sequence in a classroom where teachers and students preserve their dignity by hiding the fact that little or no learning has taken place. They initially hypothesised that safe-talk manifests itself when a dominant language is forced upon second-language speakers. However, in the data, safe-talk has been shown to take place in home-language lessons as well, reinforcing the view that safe-talk occurs when the level of cognition required is low, and when teachers conceptualise teaching as transmission whereupon learners emerge with little conceptual skills from such learning experiences. Though learners bring varying proficiencies in their L1 (including among others, oral and narrative skills) to the classroom, such competencies are rarely tapped into by teachers.

This study thus differs significantly from the view that safe-talk is a by-product of having a foreign language as LoLT, a point put forward by Hornberger and Chick (2001). They speculated that learning through a second language brings about safe-talk, because the LoLT is unfamiliar to learners. However the study has shown that in fact the teaching strategy, kind of teacher questions and the nature of classroom engagements is what gives rise to safe-talk. As seen in the L1 lessons, learners were inundated with repetitions, rhythmic chants, singing and rote memorisations.

Even in Numeracy lessons, taught through the mother tongue, teachers fail to engage learners in understanding simple mathematical concepts (such as odd and even numbers). This inability to break down and mediate abstract concepts to learner level with analogies, visual aids and practical examples adversely affects learners' ability to meaningfully grasp abstract concepts and to make sense of them.

6.1.3 Low-order cognition

Low-order cognition is pervasive in lessons as evidenced by the absence of challenging tasks and, for example, the use of closed rather than open-ended questions. As demonstrated by Transcripts 1 and 2, teacher questions were predominantly centred on learners' abilities to list and mention things, suggesting that teachers struggle with engaging learners in more cognitively-demanding tasks such as reasoning, explaining, comparing and analysing. The work of Prabhu (1987) has shown that though "what-questions" may serve other cognitive or linguistic purposes, they are the least cognitively-challenging questions, relative to questions involving children's reasoning capacity and those seeking to get learners to articulate their opinions.

6.1.4 Dominance of low-order literacy (writing and reading)

In all the lessons observed, the amount of writing was minimal. Instead, oracy-focused activities dominated. In worst-case scenarios, these oral activities were divorced from literacy, that is, if they included reading, which they often did not, such reading did not get connected to writing in relation to the skills or proficiencies focused on. When learners wrote, it was mostly at word level (in the form of dictation / spelling or isolated words on the chalkboard, as observed). Incidences of letter-level writing also occurred. The lack of extended writing in classrooms was alarming. Infrequent and inadequate exposure to writing has adverse effects on learners' abilities to grasp writing as a mode of expression and a tool of symbolising and representing reality and meaning. There was therefore an absence of substantive literacy development. In fact, Taylor et al. (2013b, p. 170) in their study found out that "(s)ingle word exercises are the most common type of writing found in the learner books", and continued by noting that, on average "half of all exercises written over the course of the year, 55% in Grade 4 and 51% in Grade 5, consisted of isolated words". They make an even more profound observation with regard to the non-existent culture of "text-level writing" in South African primary schools by noting how little extended writing is taking place. In fact, in their study close to one-third (32%) of the learner books (in schools based in North West and Northern Cape Provinces) were found not to contain a single paragraph (p.171).

Limited exposure to writing has far-reaching implications for literacy learning, particularly for children from non-literate backgrounds, who are dependent upon the schooling system for literacy learning. In the current study, the researchers found that many writing tasks in the Grade 1 and 3 learner workbooks were not completed , and those that were, were mostly at word level.

6.1.5 Teachers' inflexible interpretation of CAPS

One of the key findings of the study was teachers' acknowledgement that they have received minimal training in CAPS, a policy framework premised on teachers' abilities to make use of the learner workbooks to advance learning. The historical context behind the establishment of workbooks in the FP was the need to address the content deficit that characterised early-literacy learning in the FP. Content deficit was one of the criticisms levelled against OBE, eventually leading to its demise. In OBE, the emphasis was on the skills learners ought to learn rather than on the subject content. The learner workbooks in CAPS are seen as the answer to the question of how best teachers can facilitate the educational processes.

In the learner workbooks, there are pre-set activities and tasks for daily, weekly and quarterly learning and teaching, a marker of the overwhelming rigidity within the country's content-focus approach within the CAPS framework. In practice however, as was observed in the regular lessons, the focus on content seems to be short-changed (as interpreted by teachers) as meaning more instruction (by teachers) while learners memorise. This is further complicated by the pressure imposed by CAPS to complete scheduled activities within the stipulated time frame.

Some of the teachers misinterpret CAPS as suggesting that they have to allocate time to every activity or task and teachers quickly move on, even though learners may not have really understood or completed previous tasks. This notion that the curriculum can be fixed and synchronised in a "one-size-fits-all" approach (erroneously) assumes that learners and teachers all over the country are working from the same level of understanding and pace and, more importantly, that learning can be synchronised across all contexts.

In reality, the assumption that fixing curriculum content will automatically result in good teaching is far from the truth. The inflexibility of the curriculum may also be due to the fact that teacher-trainers, instructors (and material developers) are predominantly academics, who may perhaps be somewhat out of touch with classroom realities and teacher perceptions and capabilities. At a pedagogic level, this suggests that teachers as professionals require a more flexible curriculum that will not only enable, but empower them with authority to establish what works and what does not in their own classrooms.

6.1.6 Teachers' inability to contextualise learning

A key finding from the regular lessons was the reality that teachers lacked essential training and knowledge on how to appropriately use contextualisation strategies during teaching to enable learners to make explicit connections between their already existing knowledge frameworks and new knowledge. The development of early literacy is further hampered by teachers' inabilities to effectively assist learners to cross the bridge of learning in L1 and L2 (which is mostly English), and equally to cross the bridge between oracy and literacy, and between everyday knowledge and academic/disciplinary knowledge.

Contextualising is used here to refer to the utilisation of particular situations or events that occur in (or outside of) text or which are of particular interest to learners to motivate and guide the presentation of concepts and literacy skills (Rivet & Krajcik, 2008). In literacy learning, contextualisation thus can be a resource through which teachers can draw on learners' prior knowledge and everyday experiences as a catalyst for understanding. Failure by teachers to adequately contextualise activities has far-reaching implications for learning and concept development, especially with learners with limited exposure to academic discourse.

6.1.7 Ineffective use of various knowledge modalities in learner workbooks

In the learner workbooks, the texts contain pictures which are connected to the themes dealt with in the texts. However, when teachers take learners through the material, the pictures are treated as if they are not part of the overall text structure and reading is treated as an independent exercise. As a result, learners are unable to engage meaningfully with texts which are multimodal, and with other conventions of print. This further means that the overemphasis on the verbal elements of texts deprives learners of multimodal experiences they can learn from. Learners need not only engage with the verbal elements of texts, they have to explore the design of texts, the representation of things in texts, layout features, genre, etc. The use of different modes of encoding meaning in learners' workbooks should be integrated into the overall literacy goals of the curriculum and appropriate time should be invested in this.

6.1.8 Findings related to the intervention lessons

The findings on learner participation and teacher perceptions, based on the data that had been collected by the Limpopo team through intervention lessons, are grouped together in this sub-section because of its unique nature. A central theme in the findings is teachers' openness to embrace change for improvement.

Activating learner agency

The intervention lessons addressed one of the central issues in the regular lessons, namely, the predominance of oracy, with little or no writing taking place. In both the Sepedi HL and the EFAL intervention lessons, the teachers introduced writing early in the lesson, instead of it being an add-on at the end of the lesson. The intervention teacher for the HL used the regular texts (a picture story with three picture frames for Grade 1 and a short passage for Grade 3) to develop writing tasks in which learners could encode information in writing using their own ideas and formulations. In the intervention EFAL lesson for Grade 1, the teacher quickly wrote up the A-B-C-D rhyme to show that what the learners were singing could in fact be symbolically represented in writing. Using the regular workbooks was a way of showing that writing can be developed without having to change the materials.

In the Sepedi intervention lesson, the teacher focused on two things; first to get learners to use their own voices to interpreting texts, and then to encode the information into an organised text. The same principle was followed in the English FAL lessons, through learners writing on the board, reading aloud for others, etc. Underpinning these pedagogic practices was the belief that the liberalisation of talk, access to the chalkboard and granting agency to learners empower learners to participate in the classroom, and thus increase their confidence.

Children learn best when engaging in meaningful interactions and activities, and through the use of language, because they begin to form their own voices. This view is also articulated by Mercer (1995) who, following Vygotsky, argued that children's mental process and abstraction of literacy and concept development originate from mostly interactive exchanges, until the learners eventually are able to reconstitute their understanding.

Crossing the bridge between oracy and literacy

In the regular lessons, it has already been established that there is sufficient evidence to suggest that learners write relatively little in both L1 and L2, in either plenary sessions or individually. This is further complicated by teacher's inabilities to conceptualise age-appropriate and challenging exercises and writing tasks, within the confines of the curriculum. As a result, the teachers were unable to draw learners into interactive writing practices embedded in disciplinary knowledge.

To address this shortfall, the use of picture stories and readings within learners' workbooks formed the focus of the intervention. Through engaging the texts orally, the learners start to understand that writing is about ideas, and through guidance, and peer mediation, learners start taking risks by writing by themselves. This ascertains and reinforces the value of openness, and trying out things in the classroom, without inferior complexity that normally defines the interactions between learner and teacher.

Teacher response to change when confronted with alternative practices

The teaching interventions sought to demonstrate alternative approaches with the objective of stimulating a different kind of thinking among teachers about their classroom practices. The operational principle of the intervention was the belief that teachers can improve their knowledge and skills, not necessarily by

following a particular methodological process (or expert theories), but rather with an enquiring attitude which allows them to find out the most appropriate strategies in each situation. This kind of learning is situational, contextualised and personalised, and teachers can therefore mentally construct this conceptual process according to their classroom needs. This kind of engagement is more productive (as supported by Allwright & Bailey, 1991), and reinforces the notion that teaching needs to take into account the learners' individual characteristics, classroom context and goals for each lesson.

It is apparent that professional development that engages teachers in exploration of their beliefs and practices provides greater opportunities for self-awareness. Awareness may be in the form of their awareness of the language repertoire, including teachers' classroom management and code switching practices. In the interview, teachers drew from their observations from the English FAL intervention lesson to assert that teachers rather rephrase their instructions as opposed to frequent code-switching which, if over-used, defeats the objectives of developing learners' comprehension skills in L2.

This reflection had its origin in the teachers themselves, born out of their observation of how their learners dealt with a teacher who did not share their mother tongue, and the kind of support made available for the learners to meaningfully engage in oral exchange in English FAL. Furthermore, this observation was based on the teachers' own reflections, and to some extent self-correction, that their underlying perceptions of what they consider too difficult for their learners may not necessarily be the case. Rather, when granted opportunities for learning with guidance from the teacher, learners are able to infer meanings using whatever resources they have.

In addition, when exposed to different sets of teaching practices, teachers start to question their everyday practices, and also to critique the practices of the intervention teachers. During the group-interview sessions, pointing to the video data, one teacher remarked that some of the learners at the back of the classroom were not involved in the classrooms discussion. This, they noted, was due to the fact that the teachers were concentrating on a few active learners in front. This remark talks to the central issue of classroom inclusiveness. This highlighted why the teachers insist on practices such as chorusing, which they believe ensures that all learners are engaged, even though there is little real learning taking place. Such practices (such as rhythmic chanting, chorusing and repetitions) seem to have more to do with classroom management than classroom inclusiveness, that is, to keep learners preoccupied rather than for epistemic purposes.

As far as classroom management is concerned, this research showed that classroom management practices are influenced by teachers' beliefs and value systems. Teachers recalled that many times when they write notes for learners to copy from the board, many (of the learners) in fact start making noise. Asked how best they can be inclusive in their teaching, the teacher descried large classroom sizes as part of this problem, but also noted they have to start rethinking their teaching practices. Rethinking their teaching practices meant challenging their learners more, getting learners to write at text-level and increasing opportunities for learners to engage with the teacher during learning and teaching.

Teachers also reflected about the intervention lessons, especially about English and literacy learning. The principle of "reading readiness" is very much embedded in teachers' understanding of language and literacy learning, in that they believe that learners have to systematically progress from the phonemic level to words and then isolated sentences before they could meaningfully make sense of texts. As a result, according to them, text-writing can only take place in the third and fourth quarter. One of the teachers responded by noting that she was delighted to see her learners writing at sentence level (as demonstrated in the intervention lesson), and has since started experimenting with her learners, and she claims that

results have been positive. This indication that the teacher has already started trying out extended writing and that she has future plans to sustain it was very encouraging.

These insights were consistent with current teacher development approaches in which development is viewed as an active process of engagement whereby practitioners learn by reflecting on their current practices and the practices of others, leading to "trying out new things". The new experiences are processed in terms of the personal experiences of practitioners and finally "owned" by the teachers in whatever form they find appropriate, and in whatever way is relevant to their classrooms.

6.2 The implications of the study

The nature and contents of the set of summarised main findings in Section 6.1 suggest (i) subject didactics (pedagogical content knowledge) in action in classrooms and (ii) teacher training and development, closely linked to curriculum and assessment issues, as the two key domains in which the schooling system may have to be called upon to make those adjustments that would be required for improving literacy and language teaching and learning in the FP. The implications of this statement are unpacked further in the sub-sections that follow.

6.2.1 The relationship between safe-talk and instructional language[60]

The fact that safe-talk also occurs when the HL is being used as medium of instruction is indeed an important finding, with the clear implication that simply resorting to the mother tongue, at least without attending to weaknesses in pedagogy, is unlikely to solve our major educational problems. It is in any case impossible in multilingual classrooms. However, this finding is also important in that it immediately throws up several other questions, among which the following requires attention, debate and answers.

Does the use of the second language as medium of instruction further exacerbate pedagogical weaknesses, as one might expect if teacher expectations of learner capabilities are even lower when they have to use the second language? This might show up more clearly in numeracy lessons taught in English, as compared with the HL numeracy class observations in the study, and would need more probing in next studies.

Would simply addressing weaknesses in pedagogy be sufficient to achieve the learning outcomes sought (in both language and numeracy) in the FP, irrespective of the language used as medium of instruction?

If we still have no evidence showing that measures to raise the level of pedagogy are likely to result in the kind of language proficiency in English needed by Grade 4 learners for a smooth progression into an English-only language of teaching and learning from then on, we still have to fall back on the decades of research indicating that it is not possible for the majority of learners to attain this level of language proficiency in a second language in just three years. This means that the currently-endorsed practice of shifting into a monolingual second-language medium-of-instruction situation at Grade 4 is highly problematic and that there is an urgent need to investigate and develop alternative approaches to English-only in our multilingual society.

The foregoing unambiguous implication is also premised on the assumption that what cognitive-development theory (Abadzi, 2006; Herschensohn, 2007) says aligns with the implications of this study's findings on literacy and language development in relation to learning and teaching in the FP serving as the basis of a trajectory only ending at Grade 12, in as far as formal schooling goes. Nobody should therefore ignore the importance of accounting here and now (Grade 1 to 3; soonest) for the far-reaching vehicular

[60] Including key contributions and formulations by Margie Owen-Smith

role of language and literacy in all learning and teaching, and more, and in particular not merely perceived in the light of a pedagogical fix. The empirical evidence pointed out by Somo, one of the study's post-graduate students, are testimony to the inextricable linkages between these central issues.

6.2.2 Code-switching by teachers in (language and other) classrooms[61]

The findings from and conclusion of this study provides an opportunity to probe anew the present code-switching practices of teachers in the light of the safe-talk concept. What makes either, or the interaction between the two, and by which more-detailed dynamics, feed into the excessive use of "teacher-tell" strategies, repetition, dumbing down of content, etc.? Why does either, or their interaction, (dis)allow the utilisation of the language resources learners bring with them to the classroom in a way that increases their agency or raises their level of cognitive engagement? How is code-switching in any case entirely inappropriate in multilingual classes with a range of languages. It cannot just be about setting "when and how much code-switching can be used during a lesson" (see Somo again). Clarification is needed on how such code-switching differs from learners actively using translanguaging in task-talk (requiring teachers to move away from a monolingual mindset in relation to active-learner methodology), and how code-switching could effectively counter safe-talk by being used as part of a strong pedagogy.

In engaging in a debate around multilingualism and literacy, and teasing out this theme further, it will be a good start to depart from threads from the work of Bialystok (2011), Evans and Cleghorn (2012), and Mokolo, Somo and Rogers (three of the post-graduate students linked to the study). The work by Evans and Cleghorn (2012) on complex classroom encounters is ground-breaking and situates the matter expertly within the language policy history and context in South Africa. What stands firm is the absolute realisation among members of the project team and broader scholarly community that professionals in education also need to engage in debate around multilingualism[62] and literacy. A very brief and broad indication is provided of relevant issues in this regard by pointing to the few matters that follow. Weak and strong models of multilingualism should be debated and their limitations addressed. Weak multilingualism involves the separation of language from cognition and content. Strong multilingualism comprises the integration of language, cognition, content, culture and identity. Good working practices about the appropriate role and value of elements such as phonics and approaches such as the communicative or whole-language approach should be identified and established. Two non-negotiables are that higher-order cognitive processing should take place in classrooms, and language should not be separated / separable from cognition.

6.2.3 Phonological awareness

A host of matters related to the balanced approach to language learning and teaching in classrooms, well-embedded in CAPS, is expected to become salient more and more. Suffice it to say that minds differ greatly in relation to the definition, role and value of phonics and phonological awareness in FP language lessons. Attention will have to be given in debate and solutions, beyond what is already incorporated in the curriculum, and more as an operational matter in day to day implementation by teachers, to choices such

[61] Including key contributions and formulations by Margie Owen-Smith

[62] The authors are indebted to Margie Owen-Smith for contributing a number of insightful formulations and additions not only to this sub-section on implications, but also the recommendations and critical self-reflection sub-sections still to follow. This added much value in relation to further interpretation of the study's findings. Many of Owen-Smith's experiences from her perspective of working with teachers to develop practical methodologies, techniques and training workshops for multilingual classrooms, were echoed in the present study's findings. Such contributions are also indicated appropriately elsewhere.

as the one between systematic and embedded phonics, for instance. The role that phonological or phonemic awareness plays, and has to or could play, is not clear among teachers.

6.2.4 Use vis-à-vis quality of use of the first language

One of the significant findings of this research which has a far-reaching implication for learning and teaching is that the use of L1 as medium of learning and teaching does not automatically guarantee quality instruction. For meaningful learning and teaching to take place, firstly, teachers need a resolute understanding of pedagogic and subject/content matter in order to conceptually engage their learners. The prevalence of safe-talk in the mother-tongue content and language lessons is testimony to the reality that for quality education, resorting to mother-tongue instruction may not necessarily solve educational problems.

6.2.5 How CAPS is being dealt with, also in teacher training and development

This study suggests that teachers inflexibly interpret the curriculum (CAPS) in quite deterministic ways, and the interpretation of CAPS by teachers needs further attention. This equally suggests that teachers' operationalisation of CAPS means children rarely get any experience of doing cognitively-challenging tasks that require thinking skills. If one looks at South African schooling, over the past decade, a wealth of studies have consistently shown that effective learning and teaching in rural township schools is hampered by various challenges, key to which is poor pedagogic content knowledge by teachers. This is further complicated by the reality that teachers are not pushing learners beyond everyday knowledge and BICS. Ritualistic practices such as chorusing, rote-recall and memorising practices dominate.

However, what is critical here is that the principles that teachers are operating with require more research. While teachers may claim to be adhering to CAPS policy, they constantly attribute the minimal amount of writing in the classroom, and a narrow focus on discrete skills such as pronunciation, spelling, etc. to what CAPS policy expects them to be doing. Even in Numeracy lessons, one is inundated with the amount of time learners spent practising the Sepedi versions of numerals (*tee, pedi, tharo,* etc.).

By implication, this study suggests that current models of teacher training are neither sufficient to enable teachers to radically shift the conceptualisations they are operating with, nor change the principles underpinning their classroom practices. Instead of the traditional teacher-training model where the expert imposes curricular ideas on teachers, the study argues for a model of change where teachers' experiences are gathered and reviewed, and based on those insights, where possible areas of intervention are established. Ideal platforms for this are communities of practice that teachers themselves establish and manage, and developing formative-assessment approaches and techniques further (or assessment-for-learning, or even assessment-as-learning).

6.2.6 Innovation at the micro-level

Though observable innovative patterns may exist within teachers' routines, they are mostly at a micro-level, and occur by accident, such as allowing practices such as "shared reading". The empirical data have shown that teachers appear to use a limited range of reading and writing strategies. As far as writing is concerned, dictation was by far the dominant strategy used by teachers to get learners to write. Even so, the writing was at word level. As a result, learners are unable to develop the essential skills of engaging in writing for conceptual purposes.

6.2.7 Teacher talk vis-à-vis learner voice

The pervasive dominance of teacher talk was another aspect with a significant impact on learners' ability to develop oral fluency, particularly in L2, and the teachers seemed to be unable to create space for learner-initiated talk. At most, learners were co-opted into the classroom discourse to complete a sentence, repeat after their teachers, and or give one-word answers on the instruction of teachers. The unavailability of collaborative talk for conceptual purposes adversely affects learning and knowledge development on the part of learners.

As part of the intervention component of the study, it was essential to exemplify how learners' voice and agency may be activated in the classroom. This was based on the principle that learners gain confidence and take initiative when they actually see that their voices, ideas and writings are taken seriously, and are important enough to be written on the board. Hornberger and Skilton-Sylvester (2000, p. 99) make the point that there is an urgent need "to contest the traditional power weighting of the power relations in the classroom by paying attention to and granting agency and voice to actors and practices at what has traditionally been the less powerful spectrum which is mostly learners."

This was an important consideration in the intervention lessons. As the learners came to the chalkboard, they inadvertently became teachers of each other, where those "who don't know" learn from those "who already know". Hornberger (Hornberger & Skilton-Sylvester, 2002) goes on to point out that learners as participants in the classroom begin to see themselves as agents of learning, who have the power to meaningfully contribute to the lessons and are not merely recipients of already decided-upon norms and patterns of engagement in the classroom.

In conclusion, the regular data and intervention data have both shown that for meaningful learning to take place, classroom interactions and dialogue have to be content-driven, meaningful and co-constructed by the participants in the classroom. Positive indications were found of the readiness of teachers and learners to take on this task. This point is illustrated by making a few final points. Teachers' exposure of themselves to an observation and research conversation of this nature is much appreciated. The research team reaffirms their utmost respect for every teacher as person and for the information that each teacher has been prepared to give us access to. The education system has to show, and is busy showing already, equal respect by ensuring optimal curriculum consistency and learning material alignment, which will increasingly enable teachers to reach efficiency in their lesson preparations and delivery. Teachers can also rest assured that the research team never had the objective to evaluate "how good a teacher is", or letting any individual information reach her superiors at school or department level. Learning about improving the role and use of language in the classroom was the focus.

6.3 Key policy messages (recommendations) for language and literacy practices in the Foundation Phase

On the basis of the summary of findings provided in Section 6.1, but also its underpinning details in Chapter 5, and derived from the further distillation in Section 6.2 of these findings into implications at the crossroads we are standing at, a number of key policy messages or selected recommendations are presented next.

6.3.1 The need for CAPS-based support

The kind of support teachers require is the one where conceptual, pedagogic and content matter are integrated to ensure that teachers know exactly what to do in the classroom, and that they effectively deliver curricular ideas. This kind of engagement can happen in the form of regular training sessions, as working focus groups and/or among teachers themselves. In this respect, the DBE should initiate support

programmes to enable teachers to leverage their abilities in the area of content delivery, to conceptualise content knowledge and effectively use current workbooks, in line with CAPS.

6.3.2 Reading practices

Much has been said about ritualised chanting, chorusing and empty repetition. An essential feature of much of the reading practices observed in classrooms is that one does not know if every learner engages authentically with the reading task at hand. They could easily have mimicked other learners by parroting them with just a small time delay, or memorised overly-brief tasks at first instruction, which would enable them really to "read well" during any subsequent repetitions. It is recommended that teachers are alerted in their training and professional development to the absolute necessity to teach reading, and assess it as an ongoing and formative assessment dimension during every lesson, in such a way that they always ensure that learners engage with the decoding and decoding fluency competencies inherent to reading. This implies that group reading should be reduced in favour of individual reading. It also requires that reading known passages over and over should be reduced in favour of reading previously unseen text anew. Teachers should in this way pursue classroom practices that will enable them to detect individual reading proficiency, reading fluency and reading with comprehension.

6.3.3 Writing practices

Current teacher practices do not show learners how to explore ideas in writing and therefore deprive learners of meaning-driven writing as a conceptual process, through which learners start to view writing as an expressive medium for producing texts.

All of the above require a deeper level of processing than dictations or short-answer questions. This is particularly the case because academic writing is based on learners' skills of reformulating and manipulating information, drawing upon their writing skills to generate new links between new and existing knowledge frameworks. This suggests that there is a need for teachers to radically rethink the way writing is taught and the kind of training teachers make available to learners.

6.3.4 Professional development

The study confirmed the DoE's finding (2012), reported in the report on ANA 2011, that poor subject knowledge on the part of teachers continues to be a critical problem despite decades of training by provincial education departments, universities and NGOs. However, how to teach content, generally speaking in the context of classroom management and pedagogical principles related to the developing child, and specifically in relation to subject didactics, should not be neglected.

The solution most probably lies in a well-balanced mixture of initial training and in-service professional development. Regardless of which one is foregrounded at any moment, for both of them the learning materials should cover subject content (Sepedi and English as languages with each one's vocabulary, spelling, pronunciation, phonics, grammar, morphology, syntax, idiomatic expressions, etc.), pedagogic knowledge (that is, how to teach learners of 5 to 8 years old in classrooms), and curriculum knowledge (or didactics, that is, how to teach the subject-specific contents in sequence, using scaffolding, etc.).

Initial training should be of the best standard possible and comprise a large practical component. However, the theoretical foundations should not be neglected to allow teachers, once they have arrived in the classroom and encountered unique practical situations and challenges, to analyse and respond to them on the basis of a sound theoretical and conceptual grounding.

In the South African context, much training has to happen as part of in-service professional development. Yet, this is costly, makes high demands on already overstretched teachers, and is often ineffective. Many teachers seem to prefer formats that would enable receiving teaching tips ("just show me what to do"), but lack the bigger picture to understand where the method comes from and why it is supposedly more effective than what they have been doing. This suggests that there is a need to provide teaching and learning resources and organise collegial but small-scale training facilities in which local schools are grouped together to find common solutions to their classroom challenges. Such an approach may be useful in the context of enabling teachers to get meaningful opportunities to deal with subject-specific areas of their teaching, and therefore be able to develop alternative ways of looking at their professional classroom responsibilities. Owen-Smith (2012) has done much in developing a set of teaching methodologies aimed at overcoming inequality in South Africa along the route of multi-bilingual education.

6.3.5 Professional networks for teacher development

The significance of collaboration and engagement between researchers, academics, and NGOs (operating within the field of teacher development) and with in-and pre-services practitioners is thus key in this regard. In South Africa and beyond, the teacher-training model has been the subject of criticism from researchers and teachers, though seems to enjoy the support of literacy specialists in South Africa, teacher trainers and authorities in education administration. There is equally a strong body of research that has shown that the current workshop approach of teacher development is not enough to assist practising teachers to radically transform their everyday practices.

This suggests that there is a need for locale-specific initiatives where local schools and teachers link up with researchers and progressive thinkers located within higher education and NGOs to progressively conceptualise alternatives to current problems impacting teaching and learning. As shown in this study, this could involve researchers acting as teachers and actually entering classrooms as teachers, and whose practice can stimulate critical reflection and theory revision,

A number of specific recommendations / policy indications common to the matters covered in sub-sections 6.3.4 and 6.3.5 above are raised in closing. As a reiteration, in addition to mere content knowledge, teachers should also be trained well in mediating such content knowledge to learners, through training in pedagogical / didactical knowledge. This training should preferably happen in the medium of instruction. Current training should be expanded to include the following recommendations:

- Make known aspects of teaching, that are discovered by research to be innovative, to other teachers as training inputs (un-theorised, as it were)
- Let researchers / trainers act as teachers to demonstrate alternative practices (theory-driven)
- Expose teachers to alternative classroom practice/s in order to elicit their tacit beliefs and to provoke revision thereof
- Elaborate and articulate the two main models of teacher training vis-à-vis teacher development further
- Let meaningful collaborative learning and other interaction become the norm (note: this was not a specific focus of the study)
- Let the curriculum (CAPS, Teacher Guidelines, and relevant training) allow more flexibility to teachers to go beyond CAPS (a CAPS+, formulated in view of the perceived over-deterministic interpretation of CAPS by teachers; who should return to / allow for "code-switching", as before under the *de facto* use of multilingual resources for conceptual purposes now discouraged by CAPS)
- Make specific arrangements about how formative feedback, dependent on cognition, is handled as part of classroom interaction management (see the I-R-F / I-R-(F) sequences)

- Make sufficient space for “reading for pleasure” vis-à-vis reading for meaning/knowledge, both in the HL and EFAL
- Enhance access to learning materials and teacher practice to incorporate high-order cognition activities (challenging tasks / use of open-ended questions, etc.)
- Enable teachers to mediate learners’ prior knowledge and subject content (specified by CAPS) through improved classroom practice resulting in optimal learner conceptual development
- Enable teachers to use oracy as a means to acquire literacy
- Enable teachers to use cognitively challenging academic oracy (inclusive of cultural genres)
- Enable teachers to move beyond literacy focused at letter-and word-level
- Enable teachers to use the full linguistic knowledge and competence that learners bring to the classroom (i.e., overcome a linguistic deficit view of learners, especially in the home language)
- Enable teachers to interpret curricula more flexibly and responsively to develop creative / innovative / effective teaching strategies.

6.3.6 Developing ways to use learners’ own languages as classroom resources[63]

Given that no evidence is available yet to indicate that simply removing safe-talk as a factor in the kind of classrooms addressed in this study is likely to result either in (a) successful attainment of FP language and literacy outcomes or, consequently, (b) a successful transition to English Second Language as sole LoLT thereafter, urgent attention needs to be paid to developing ways to use learners’ own languages as a supporting resource. This solution should also be one that does not use teacher code-switching merely as currently practised by teachers.

Further study is needed to look more closely at the influence of language choice on pedagogy, beyond noting that safe-talk is prevalent, irrespective of the medium of instruction, particularly in numeracy classes where evidence (in Owen-Smith’s observations) suggests that safe-talk occurs to an even greater degree.

6.3.7 Further research required

Given the trajectory of demographic and urban developments, with monolingual classrooms a receding feature in our educational landscape (see also Banda, 2010), further studies of complex multilingual situations need to become a priority. Such work can be based on extensive local experience (for instance, Bloch, 2000).

A further study is needed involving teachers in their own classroom action-research projects, aimed at developing and testing practical multilingual methodologies that do not use teacher code-switching.

More language and literacy acquisition studies need to be done in numeracy classes, which potentially offer at least as much opportunity for language and literacy development as language-as-subject classes.

6.3.8 Language-policy research

It is recommended that a strong language-policy evaluation and research thrust always be maintained in parallel with conceptual and empirical (operational) developments in the field of language and literacy teaching and learning. This should be enhanced by expanded training opportunities for education policy researchers and practitioners. The matter of language varieties, or the standardisation of African languages, will have to be dealt with very appropriately (Lafon & Webb, 2008).

[63] Sub-sections 6.3.6 and 6.3.7 include key contributions and formulations by Margie Owen-Smith.

6.4 Critical reflection on the approach to and contents of the study

The mode that the completed study has operated in had a number of positive outcomes. It also posed some limitations, though. These two facets are reflected on briefly next.

6.4.1 Beneficial outcomes

The nature of the funding call and its requirements for the structuring of the research consortium meant that inter-provincial collaboration got enhanced. Intensive networking, cross-pollination, comparative investigation, exchange of information on local conditions and practices, capacity enhancement and related benefits ensued from this. Every participant's conceptual foundations and knowledge about the topic has been enriched as a result.

Inter-institutional and interdisciplinary research activity constituted a related positive experience for the team. Not only were researchers from a rural university and academics from city universities brought into regular contact, but the level of contact occurred across a wide range from established specialists through mid-career scholars to young academics and post-graduate students. They came from a wide range of disciplines as well, including psychology, education, linguistics, and the like. In addition, researchers also engaged with practitioners, education managers, teachers, and related language specialists, for instance with regard to the translation of observation scripts. The ongoing networking benefits are substantive. The involvement of one of the senior partners also ensured international exposure and contact (Lafon), besides more incidental other such opportunities.

Paradigm exploration and revision, and the eventual development and application of a preferred approach, was another highlight of the study. Paradigm-driven research often do not allow for much paradigm revision, as application of a selected paradigm is prioritised almost exclusively. The current study's paradigm-guided approach allowed flexibility that led to rich debates and enabled the interpretation of the same data from many perspectives towards a much-expanded and rich set of interpretations and findings.

Related to the abovementioned point, very promising avenues were opened by including an "intervention research" perspective as one component of the study. The construct "intervention" in research presupposes some level of activism, with the objective of activating change. In retrospect, and to start introducing the next sub-section on gaps pertaining to the study, the limitation related to this part of the study had to do with the fact that the study was not interested in "change as an end", but rather was interested in exploring the transformative processes teachers undergo when they engage in critical reflections and discussions about their own teaching, and the teaching of others. So, in this study, the intervention lessons (along with regular lessons) were used as stimuli for teachers to reflect deeply about their practices, and in the process start to interpret the CAPS policy, their pedagogic practices and principles informing their classroom actions and behaviours. It is this context that the rationale behind the intervention lessons has to be understood. Researching the process of change accurately captures the complexity of the study, in contrast to "activating change", which would have meant ensuring that there is a take-up of the intervention.

However, for this study, very few intervention lessons were taught and the interactions with the teachers on the interventions were brief and fleeting. In a more sustained teacher-development model, the interactions would have carried for long stretches of time with frequent meetings between the researcher and the teachers. More time would also have been devoted to the viewing of the videos of the regular and intervention lessons. Both the researchers and the teachers needed to have engaged in deeper, self-critical

reflections on their own and each other's teaching. However, due to the timeframe for the research and the limited nature of the interventions, this kind of sustained engagement was not possible.

Equally, it is difficult to judge whether teachers actually took up some of the intervention teaching practices and experimented with them over a period of time.

6.4.2 Gaps and limitations

A specific literacy perspective has not been pursued in desirable depth because of practical and specific conceptual reasons, as acknowledged at the appropriate places in the report. The early months of literacy acquisition through reading and writing in Grade 1, according to well-sequenced steps unfolding in very quick succession, are crucial, though. This element should perhaps have been foregrounded much more in the study. However, it definitely has to be prioritised in subsequent research and all teaching and professional development. Accommodation should be made when reading relevant discussions and findings in the rest of the report of the present study's choice and eventual approach in emphasising language acquisition and development above literacy acquisition and development.

It is unfortunate that the study was not able to include multilingual classrooms[64] that would have enabled demonstrating the use of multilingual techniques which do not include code-switching, particularly those that are at the same time attempting to address the traditional pedagogical weaknesses associated with safe-talk.

Curriculum coverage was not part of the sampling strategy and design of the study. Again, this was not a methodological oversight, but an outcome determined by the availability of resources. Such inclusion, though, may have enabled reaching additional clarity in relation to findings pertaining to learners' eventual proficiencies and school achievement. The results of some structured oral learner assessment, a focus on oracy for CALP, the role played by folk tales and non-fiction and other genres of language, etc., are but a few avenues of expansion that would have become possible.

Should additional resources have been available, the study may also have gained much from expanding the type of school in its sample. Such inclusion would have made it possible to enhance the comparative element in relation to determining how the influence of the conditions under which learners learn and get taught varies along with learners' eventual proficiencies and school achievement. It would, for instance, have allowed comparing dynamics and outcomes across a wider typology of schools and locations, including inner-city schools, small rural schools, public and independent schools, etc.

Another limitation of the study was that its scope only allowed for a limited number of repeated cross-sectional lesson observations. While this produced the benefit of capturing information with some variance across grade, subject and school type or location, a cohort or longitudinal perspective was direly missed for clarifying some study questions about the effect of progression on learner achievement and learning over time in relation to language coverage during teacher practice. Funding limitations curbed the scope of the study in this regard as well. Taylor et al. (2013a, 2013b) calls for such a cohort approach, besides the use of nationally representative samples, in order to succeed in isolating the effect of teacher practice better.

The internal structuring of the NRF costing model has a number of effects on what grant recipients can achieve. Coming together as a first cohort of academics from at least three institutions in this way in a multi-year endeavour, provided a laboratory situation, as it were, after which some reflection is warranted. The two main determinants in the NRF costing model that affect the eventual nature of the research

[64] This comment is based on a contribution and some formulation by Margie Owen-Smith.

collaboration most are, to our perception, the exclusion of any substantive ability to cover labour costs and the allocation of approximately 60% of the grant to student support (bursaries). These two elements *per se* are both very meaningful in that they allow for strong capacity development and collaboration thrusts. They also rightly assume that grant-holders' time is paid for by their own institutions. However, the additional dynamics related to setting up, managing, administering and recording everything related to the collaboration, which by virtue of its funding requirements is spread so widely over organisations, distances and the like, make the consortium's operations very complex, time consuming and costly. It becomes difficult to do these requirements justice in the face of the fact that all participants retain core obligations at their own offices, be it teaching, doing very large other studies, or focusing on their dissertations and theses, which are much larger, make greater demands and impose higher priorities compared to the relatively small grant-related direct-cost budgets. The resulting dynamics were at times experienced as very taxing and limiting the extent of investigation possible.

Having said and reported everything in the abovementioned paragraph, sub-section, main section, chapter and report as a whole, it has been a privilege to be involved in this endeavour! The invaluable exposure to the topic, the collaboration with and opinions of every investigator, partner, student and other collaborator, the information that every research participant gave us access to, all the conceptual, theoretical and research knowledge encountered, and the findings from the work, have been a very enlightening journey.

Glossary

In this part, the concepts often used in this report are defined. Any specific small adjustments of meaning in the main text are pointed out where they occur. A few terms are cited even though they do not appear in the report text in the exact words. In addition, a small number of expanded working definitions, as adopted early in the study, include a few of the concepts below, and are provided in Section 3.1 under the sub-heading "Central concepts and working definitions".

Academic language[65#] Language "used in educational contexts and for educational purposes", and having greater grammatical complexity compared to daily conversation, greater variation in vocabulary, and terminology specific to school subject contents.

Acquisition planning[#]**:** "Language planning that relates to the allocation of resources and incentives to support individuals in learning a language."

Additive bilingualism[#]**:** "Maintenance of the home language while the second, school or societal language is learned."

Basic interpersonal communication skills (BICS)[#] "Ability of language minority children to speak fluently in informal contexts." Note: Although learners may comprise a large majority from the perspective of the use of their African home languages conversationally and for teaching in learning in Grades (R)1-3 in South Africa, they constitute a minority in relation to having English as mother tongue / home language, hence their difficulty in transcending conversational levels of proficiency.

Code Depending on the context, the term refers either to the letter symbols representing oral speech, thus relating it closely to the tasks of decoding (reading or learning to read text) and encoding (writing or learning to write text), as associated with literacy and switching between 'code' and 'meaning' in language classroom interaction, or merely different language varieties or language, as related to code-switching, for instance.

Code-switching[#] When teachers and learners switch between two or more languages, varieties or codes during a single conversation or lesson related to teaching and learning in the classroom.

Cognitive academic language proficiency (CALP)# "The academic language which is developed within schooling and **literacy** contexts." In its narrow sense, it may also be referred to as "disciplinary literacy" as "the ability to use the language of the disciplines effectively and fluently".

Cognitive benefits[#] "The advantages of being bilingual related to the brain and mind."

Critical period[#] "A limited window of time in language development during which exposure to certain linguistic stimuli is necessary for language to be learned."

Decode To convert written language (text) into oral language or meaning (message).

De facto language policies[#] "Norms and expectations about how languages should be used and taught which have the effect of policy while not being officially specified in a text."

[65#] The definitions of concepts indicated with "[#]" in this glossary were borrowed (reported in quotation marks) or adjusted from the glossary found in Silver and Lwin (2014, 177-186).

De iure language policies[#] "Norms and expectations about how languages should be used and taught as set forth in legal codes and documents."

Encode To convert oral language (meaning or message) into written language (text).

Grapheme(s) Refer(s) to the written, coded or textual form(s) of language, and can include individual letters, letter combinations (digraphs and trigraphs, for instance), morphemes, words and sentences as a whole.

Home language Refers to the single language or multiple languages that a learner (or teacher, parent or caregiver) speaks at home most of the time.

Interlanguage[#] Is a "term used to refer to a learner's developing second language, emphasizing that although it may differ from the target language as spoken by native speakers, it is an internally consistent linguistic system".

Language acquisition[#] For a first language, it involves "(a)cquiring a first language in life, in naturalistic settings" (acknowledging the possiblity of it comprising more than one language / bilingualism). For a second language, it involves "(a)cquiring or learning a language after a first language has already been learned".

Language as means of or instrument for conserving culture and heritage[66]***** The term refers to language as instrument towards conserving culture and heritage and involves those activities aimed at keeping alive and making available language products, traditions and contents from the past to current and future speakers and readers of such a language so as not to lose the knowledge about the views, attitudes, values, norms and lifestyle of former users of that language.

Language development* At the individual level, it refers to a learner's continuously growing proficiency in understanding, speaking, reading and writing a language through both the formal efforts associated with teaching and learning in the classroom and those actitivities and exposure outside the classroom in the context of the school, community and home. With reference to a language as such, it refers to expanding the capacity of a language to be used effectively for any function, in any domain and at any level, including management, the law and courts, parliament, science, schools and tertiary education (as subjects and mediums of instruction).

Language empowerment* Refers to those actions aimed at the elevation of the value of a language in order to enable its speakers (users) to realise their objectives in all contexts, including interpersonal interaction, social relations, politics, psycho-social wellbeing, the economy, trade and industry, the world of work and education.

Language instruction[#] Refers to the "teaching or instruction of language as an object of study". In the context of schooling, it refers to language(s) as subject(s).

Language policy[#] Refers to the "codification of a community's linguistic practices as well as interventions to plan or change those practices". School/education language policy refers to these in the context of schools and formal education.

[66]* The definitions of concepts indicated with "*" in this glossary were provided by Prof Vic Webb and were translated from their Afrikaans versions as proposed by him for inclusion in a research / survey questionnaire related to a study (ATR) that he was involved in during 2012.

Language promotion* Refers to those actions aimed at the expansion of the capacity, status and prestige, knowledge of, proficiency in, functions for which, contexts in which and levels at which a language is used.

Language resources (language as resource)[#] Refers to "(a)n orientation to language (policy) that positions students' (learners') existing linguistic abilities in a positive way, highlighting their applicability to accessing opportunites for learning and social engagement".

Language vitalisation* Refers to the expansion and elevation of the use of a language by home-language and other speakers of a language for an increasing number of functions and in an increasing number of contexts, including its social, political, economic and educational enhancement, as well as creating and organising opportunities for celebrating its value.

Linguistic interdependence (hypothesis)[#] "The hypothesis suggests that language and **literacy** skills can be transferred from L1 to L2 in bilingual learners. It indicates that some reading skills are basic and fundamental in the reading process; therefore, once such skills are learned in once language, these can be used in any other language."

Linguistics[#] The study of language.

Literacy# "The development of reading and writing skills in formal, informal and academic contexts."

Literacy acquisition Developing the ability to read and write in a first and any additional languages, normally through formal instruction or learning and teaching in a school or classroom context. It can happen consecutively or in parallel for multiple languages. Some proficiencies can be considered generic, although others are language-specific; hence the possibility of being deemed biliterate and triliterate.

Literacy development Refers to a learner's continuously growing proficiency in reading and writing a language through both the formal efforts associated with teaching and learning in the classroom and those actitivities and exposure outside the classroom in the context of the school, community and home.

Meaning The message of communication or conversation that is transfered orally or in writing or text.

Mother tongue Is a refinement of the concept of "home language" and refers to the single language or multiple languages that a learner first got exposed to at home by his/her parent/s or caregiver/s and formed the language in which the learner became most fluent and proficient orally at the time of going to school. In exceptional cases, involving changes in environment when the child was aged two to four, it may become difficult to decide on the mother tongue, which would entail the language of first minimum proficiency in such a case. Increasing use of the term "father tongue" is being encountered.

Oracy[#] "The use of speaking and listening skills to communicate effectively and influence the social world, including using talk to learn and construct knowledge jointly with others."

Phoneme[#] A "speech sound" which "is part of the structure of (phonetic) pronunciation in a language".

Sequential bilingualism[#] "Those situations in which individuals become bilinguals later in their lives, frequently through school-based study."

Simultaneous bilingualism[#] "Those situations in which children acquire two or more languages in their earliest childhood at the same time."

Sociolinguistics[#] "The study of how language works in a social context."

Speech acts[#] "Types of action or things performed or done through language."

Standard variety (dialect)[#] The variety "given special prestige in a community". This prestige extends to expectations that it "be used in most writing and in formal circumstances", including education, where it is often referred to as "standard language".

Subtractive bilingualism[#] "The loss of one language in order to learn another language". (The situation often results in sub-standard acquisition and development of the other language, therefore both languages in the end, because foundational proficiencies in the first language were not transferred to the other.)

Text[#] "The largest unit of linguistic structure which is above the level of clause and sentence", although the present study on occasion refers to text down to the level of graphemes.

Translanguaging[#] "The usage of multiple languages according to the perspectives of bilinguals."

Variety[#] "A way of using a language that differs in form from some other way." The concept includes reference to styles, dialects and accents, for instance.

References

Abadzi, H. (2006). Efficient learning for the poor: Insights from the frontier of cognitive neuroscience. Washington: World Bank.

Abadzi, H. (2014). Reading essentials: Cognitive science and the gift of fluency for all. Arlington, Texas: University of Texas (also World Bank; Creative Commons license). (Draft Course Guidebook)

Abdi, A.A. (2006). Culture of education, social development, and globalization: Historical and current analyses of Africa. In A.A. Abdi, K.P. Puplampu & G.J.S. Dei (Eds), African education and globalization: Critical perspectives (pp. 13-30). Lanham, MD: Lexington Books.

Abdi, A.A., Puplampu, K.P. & Dei, G.J.S. (2006a). African education and globalization: An Introduction. In A.A. Abdi, K.P. Puplampu & G.J.S. Dei (Eds), African education and globalization: Critical perspectives (1-12). Lanham, MD: Lexington Books.

Abdi, A.A., Puplampu, K.P. & Dei, G.J.S. (Eds). (2006b). African education and globalization: Critical perspectives. Lanham, MD: Lexington Books.

Akkari, A. & Dassen, P.R. (Eds). (2004). Pédagogies et pédagogues du Sud (Pedagogies and pedagogues from the South). Paris: L'Harmattan.

Alexander, N. (1999). English unassailable but unattainable: The dilemma of language policy in South African Education (PRAESA Occasional Paper No. 3). Cape Town: PRAESA.

Alexander, R. (Ed.). (2010). Children, their world, their education: Final report and recommendations of the Cambridge Primary Review. London: Routledge.

Alidou, H. (2009). Promoting multilingual and multicultural education in Francophone Africa. Challenges and perspectives. In B. Brock-Utne & I. Skattum (Eds), Languages and education in Africa, a comparative and transdisciplinary analysis. (pp. 105-132). Oxford: Bristol Papers in Education (4).

Alidou, H., Boly, A., Brock-Utne, B., Diallo, Y.S., Heugh, K. & Wolff, H.E. (2006). Optimizing learning and education in Africa – the language factor: A stock-taking research on mother tongue and bilingual education in sub-Saharan Africa. Association for the Development of Education in Africa (ADEA). http://www.adeanet.org/biennial-2006/doc/document/B3_1_MTBLE_en.pdf.

Allwright, D. (1984). Why don't learners learn what teachers teach? The interaction hypothesis. In D.M. Singleton & D.G. Little (Eds), Language learning in formal and informal contexts (pp 3-18). Dublin: IRAALA.

Allwright, D. (1988). Observation in the language classroom. London: Longman.

Allwright, D. (1993). Integrating 'research' and 'pedagogy': Appropriate criteria and practical possibilities. In J. Edge & K. Richards (Eds), Teachers develop teachers research: Papers on classroom research and teacher development (pp 125-135). Oxford: Heinemann.

Allwright, D. & Bailey, K.M. (1991). Focus on the language classroom: An introduction to classroom research for language teachers. Cambridge: Cambridge University Press.

Allwright, R.L. (1981). What do we want teaching materials for? English Language Teaching Journal, **36**, 5-18.

Altinyelken, H.K., Moorcroft, S. & Van der Draai, H. (2014). The dilemmas and complexities of implementing language-in-education policies: Perspectives from urban and rural contexts in Uganda. International Journal of Educational Development, **36**, 90-99.

Baker, C. (1993). Foundations of bilingual education and bilingualism. England: Multilingual Matters Ltd.

Bamgbose, A. (2004). Sauce for the goose, sauce for the gander: Why an African child should be taught in an African Language. In J. Pfaffe, (Ed.) Making multilingual education a reality for all. Operationalizing good intentions. (Proceedings of the joint Third International Conference of the Association for the Development of African Languages in Education, Science and Technology (ADALEST) and the Fifth Malawian National Language Symposium held at Mangochi, Malawi, 30 August – 3 September 2004. Zomba: Centre for Language Studies, University of Malawi and GTZ., 18-36.

Banda, F. (2010). Defying monolingual education: Alternative bilingual discourse practices in selected coloured schools in Cape Town. Journal of Multilingual and Multicultural Development, **31**, 221-235.

Bangura, A.K. (1996). Pedagogy and foreign language teaching in the United States: Andragogy to the rescue. Paper presented at the Odyssey of the Mind Association International Conference on Nurturing Creativity and Problem Solving in Education (1st, Washington, DC, 11-13 October 1996. http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED413758 retrieved 22 June 2012

Barber, M., & Mourshed, M. (2007). How the world's best performing school systems come out on top. London: McKinsey & Company.

Bardovi-Harlig, K. (1996). Pragmatics and language teaching: Bringing pragmatics and pedagogy together. In L.F. Bouton (Ed.), Pragmatics and language learning (Monograph Series Vol. 7) (pp. 21-39). Urbana-Champaign: University of Illinois.

Barnes, D. (1969). The language, the learner and the school. Harmondsworth: Penguin.

Barnes, D. (1976(1968)). From communication to curriculum. Harmondsworth: Penguin.

Basu, R. (2011). 'Integration' through linguistic diversity: Toronto public elementary schools as re-definitional sites. Toronto: York University (e-book).

Bearne, E. (2007). Writing. In T. Cremion & H Dombey (Eds), *Handbook of primary English in initial teacher education* (pp. 1-14). London: NATE. (http://www.ite.org.uk/ite_readings/writing_20071130.pdf)

Besharati, N.A. (2014). Platinum & passes: The impact of mining investments on education outcomes in South Africa (Research Report 16; May 2014; Development Effectiveness Project). Johannesburg: South African Institute of International Affairs (SAIIA) & WITS School of Governance.

Benson, C. (2000). The primary bilingual education experiment in Mozambique, 1993-1997. International Journal of Bilingual Education and Bilingualism, **3(3)**, 149-166.

Benson, C. (2004a). Do we expect too much from bilingual teachers? Bilingual teaching in developing countries. International Journal of Bilingual Education and Bilingualism, **7(2)**, 204-221.

Benson, C. (2004b). The importance of mother tongue-based schooling for educational quality. (Background paper for EFA Global Monitoring Report 2005). Paris: UNESCO. (See http://www.efareport.unesco.org or http://portal.unesco)

Bialystok, E. (2011). Reshaping the mind: The benefits of bilingualism. Canadian Journal of Experimental Psychology, **65**, 229-235.

Bialystok, E., Barac, R., Blaye, A. & Poulin-Dubois, D. (2010). Word mapping and executive functioning in young monolingual and bilingual children. Journal of Cognition and Development, **11**, 485-508.

Bialystok, E. & Craik, F.I.M. (2010). Cognitive and linguistic processing in the bilingual mind. Current Directions in Psychological Science, **19**, 19-23.

Bialystok, E., Craik, F.I.M., Green, D.W. & Gollan, T.H. (2009). Bilingual minds. Psychological Science in the Public Interest, **10(3)**, 89-129.

Bloch, C. (2000). Young children's literacy learning in multilingual contexts, with special reference to South Africa. In R. Trewby & S. Fitchat (Eds), Language and development in Southern Africa - Making the right choices (pp. 189-202). Okahandja, Namibia: Gamsberg MacMillan.

Bloch, G. (2009). The toxic mix: What's wrong with South Africa's schools and how to fix it. Cape Town: Tafelberg.

Bourdieu, P. (1983). The forms of capital. In J.G. Richards (Ed.), Readings in economic sociology (pp. 241-258). New York, NY: Greenwood Press.

Bourdieu, P. (1991). Language and symbolic power. Cambridge: Polity Press.

Brock-Utne, B. (2000). Whose education for all? Recolonization of the African mind. New York: Falmer Press. http://site.ebrary.com/lib/iupui/Doc?id=10054233; http://site.ebrary.com/lib/iueast/Doc?id=10054233; http://site.ebrary.com/lib/iuse/Doc?id=10054233

Brock-Utne, B. & Skattum, I. (Eds). (2009). Languages and education in Africa. A comparative and transdisciplinary analysis. Oxford: Symposium Books.

Bruner, J. (1986). Actual minds, possible worlds. Cambridge: Harvard University Press.

Caro, D.H., Sandoval-Hernández, A. & Lüdtke, O. (2013). Cultural, social, and economic capital constructs in international assessments: An evaluation using exploratory structural equation modelling. School Effectiveness and School Improvement, http://dx.doi.org/10.1080/09243453.2013.812568 (accessed 3 December 2013).

Chall, J.S. (1967). Learning to read: The great debate. New York: McGraw-Hill.

Cheatham, G.A. & Ro, Y.E. (2010). Young English learners' interlanguage as a context for language and early literacy development. Young Children, **65(4)**, 18-23.

Chimbutane, F. (2011). Rethinking bilingual education in postcolonial contexts. Clevedon: Multilingual Matters.

Chisholm, L. (Ed.). (2004). Changing class: Education and social change in post-apartheid South Africa. London: Zed Books & Cape Town: HSRC (Human Sciences Research Council) Press.

Chomsky, N. (1959). Verbal Behavior. By B.F. Skinner. Language, **35(1)**, 26-58.

Christie, P., Butler, D., & Potterton, M. (2007). Report to the Minister of Education: Schools that work. Pretoria/Cape Town: Department of Education, South Africa (Ministerial Committee).

Creese, A. & Blackledge, A. (2010). Translanguaging in the bilingual classroom: A pedagogy for learning and teaching? The Modern Language Journal, **94**, 103–115.

Cummins, J. (1979). Linguistic interdependence and the educational development of bilingual children. Review of Educational Research, **49**, 222-251.

Cummins, J. (1984). Bilingualism and special education: Issues in assessment and pedagogy. Clevedon: Multilingual Matters.

Cummins, J. (1992). Language proficiency, bilingualism and academic achievement. In P. Richard-Amato & M. Snow. (Eds), The multicultural classroom (pp. 16-26). London: Longman.

Cummins, J. (1996). Negotiating identities: Education for empowerment in a diverse society. Ontario: California Association for Bilingual Education.

Cummins, J. (2008). BICS and CALP: Empirical and theoretical status of the distinction. In B. Street & N.H. Hornberger (Eds), Encyclopedia of language and education: Literacy (pp. 71-83). New York: Springer Science.

Cummins, J. & Yee-Fun, E.M. (2007). Academic language. In J.Cummins & C. Davison (Eds). International handbook of English language teaching (pp. 797-810). New York: Springer.

Cunha, F., Heckman, J.J., Lochner, L. & Masterov, D.V. (2005). Interpreting the evidence on life cycle skill formation (NBER Working Paper Series, 11331). Cambridge, MA: National Bureau of Economic Research. (See also http://www.nber.org/papers/w11331)

De Saussure, F. (1959). Course in general linguistics. New York: Philosophical Library.

Deacon, R., Osman, R. & Buchler, M. (2009). Audit and interpretative analysis of education research in South Africa: What have we learnt? Pretoria: National Research Foundation. (Research report) (Also available: http://www.nrf.ac.za/files/Doc%202A-FINAL_REPORT%20NRF%20Education%20Audit%2031%20March%202009(1).pdf)

Dei, G.J.S. & Alireza, A. (2006). Indigenous knowledge and globalization: An African perspective. In A.A. Abdi, K.P. Puplampu & G.J.S. Dei (Eds), African education and globalization: Critical perspectives (pp. 53-78). Lanham, MD: Lexington Books.

Department of Basic Education. (2013). The Incremental Introduction of African Languages Policy (IIALP). Pretoria: DBE (Draft policy).

Department of Education. (1997). Language in Education Policy. Pretoria: Government Printer.

Department of Education. (2008a). 2007 Grade 3 SE (systemic evaluation) leaflet. Retrieved November 10, 2008, from Department of Education (South African Government) Web site: http://www.education.gov.za

Department of Education. (2008b). “Government Notice No. 306 (14 March 2008), Foundations for Learning Campaign 2008–2011”, Government Gazette, **513**, No. 30880.

Department of Education. (2012). Report on the Annual National Assessments of 2011. Pretoria: DoE Publications.

Dewey, J. (1916). Democracy and Education: An introduction to the philosophy of education. London: Macmillan.

Eisenchlas, S. (2010). Conceptualising "communication" in foreign language instruction. Babel, **44(2)**, 12-21.

Eoyang, E.C. (2003). Teaching English as culture: Paradigm shifts in postcolonial discourse. Diogenes, **50(2)**, 3-16.

Evans, R. & Cleghorn, A. (2012). Complex language encounters: A South African perspective. Rotterdam: Sense.

Fanson, C. (2009). Bilingualism and second language acquisition. National Association for the Development of Language in the Curriculum (NALDIC). Retrieved from http://www.naldic.org.uk/ITTSEAL2/teaching/SLA.cfm

Feyerabend, P. (1975). Against method: Outline of an anarchist theory of knowledge. London: New Left Books.

Flanders, N.A. (1962). Using interaction analysis in the in-service training of teachers. Journal of Experimental Education, **30**, 313-316.

Fleisch, B. (2004). Does higher education expenditure generate higher learner achievement? A study of historically disadvantaged schools in Gauteng. South African Journal of Education, **24**, 264–269.

García, O., Skutnabb-Kangas, T. & Torres-Guzmán, M. (Eds) (2006). Imagining multilingual schools: Languages in education and globalization. Clevedon: Multilingual Matters.

García, O. (2009). Bilingual education in the 21st century: A global perspective. Hoboken (NJ), Boston, Oxford: Wiley-Blackwell.

Garcia, O., with N. Flores. (2012). Multilingual pedagogies. In M. Martin-Jones, A. Blackledge & A. Creese (Eds), The Routledge handbook of multilingualism (pp. 232-246). City: Routledge.

Garcia, O. & Li Wei. (2013). Translanguaging: Language, bilingualism and education. Basingstoke, Hampshire: Palgrave Pivot.

Gibbons, P. (2006). Bridging discourses in the ESL classroom: students, teachers and researchers. London: Continuum.

Glanz, C. (2013). Why and how to invest in African languages, multilingual and multicultural education in Africa. In H. McIlwraith (Ed.), Proceedings of Language in Education Conference (pp. 57-68). Juba: British Council.

Goswami, U. & Bryant, P.E. (1990). Phonological skills and learning to read. Hove, East Sussex, England: Psychology Press.

Gould, S.J. (2002). The structure of evolutionary theory. London, Glascow: Amazon.

Grin, F. (2005). The economics of language policy implementation: Identifying and measuring costs. In N. Alexander, (Ed.), Mother-tongue based bilingual education in Southern Africa. The dynamics of implementation. Multilingualism, subalternity and hegemony of English, Volume 4, 11-25. Frankfurt-am-Main and Cape Town: Multilingualism Network and Project for the Study of Alternative Education in South Africa.

Haire, K. & D.S. Matjila. (2008). Teaching for cultural relevance and restoration in the multi-lingual South African setting: The pedagogical potential of bi-lingual Setswana-English stories. AlterNation, Journal of the Centre for the Study of Southern African Literature and Languages, **15(2)**, 158-180.

Harel, D. (1987). Statecharts: A visual formalism for complex systems. Science of Computer Programming, **8**, 231-274.

Harmer, J. (1991). The practice of English language teaching. New York: Longman Group.

Heath, S.B. (1988). Language socialization. In D. Slaughter (Ed.), Black children and poverty: A developmental perspective (pp 29-49). San Francisco: Jossey Bass.

Heath, S.B. (2008). On ethnography: Approaches to language and literacy research. New York: Teachers College Press.

Heckman, J.J. (2000). Policies to foster human capital. Research in Economics, **54**, 3–56.

Hedegaard, M. (1990). The zone of proximal development as a basis for instruction. In L.C. Moll (Ed.), Vygotsky and education: Instructional implications and applications of sociohistorical psychology (pp. 349-371). New York: Cambridge University Press.

Herschensohn, J. (2007). Language development and age. Cambridge: Cambridge University Press.

Heugh, K. (2013a). International disappointment in *whole language* literacy and *communicative* language teaching: Reconfiguring debates from the global south. Presentation made at an HSRC Seminar, 5 February 2013, Pretoria.

Heugh, K. (2013b). Multilingual education policy in South Africa constrained by theoretical and historical disconnections. Annual Review of Applied Linguistics, **33**, 215-237.

Heugh, K. (2014). Bi-/tri-literacy and multilingualism in schools: Managing learning and teaching in local and international languages. Keynote presentation at the Government Cluster Policy Workshop on "Bi-literacy and multilingualism in schools: Managing learning and teaching in the local and international languages", CSIR Conference Centre, Pretoria, 20 February 2014.

Heugh, K. (2015). Epistemologies in multilingual education: Translanguaging and genre – companions in conversation with policy and practice. Language and Education, DOI: 10.1080/09500782.2014.994529 (retrieved 29 Jan 2015; http://dx.doi.org/10.1080/09500782.2014.994529).

Heugh, K., Benson, C., Berhanu, B. & Mekonnen, A.G.Y. (2007). Study on medium of instruction in primary schools in Ethiopia. Addis Abeba: Ministry of Education.

Higby, E., Kim, J. & Obler, L.K. (2013). Multilingualism and the brain. Annual Review of Applied Linguistics, **33**, 68-101.

Hinkel, E. (Ed.) (2005). Handbook of research in second language teaching and learning. Mahwah, NJ: Lawrence Erlbaum.

Hornberger, N.H. (2003a). Continua of biliteracy: An ecological framework for educational policy, research and practice in multilingual settings. Clevedon, UK: Multilingual Matters.

Hornberger, N.H. (2003b). Multilingual language policies and the continua of biliteracy: An ecological approach. In N.H. Hornberger (Ed.), Continua of biliteracy (pp 315-334). Clevedon, UK: Multilingual Matters.

Hornberger, N.H. & Chick, J.K. ((1998)/2001). Co-constructing school safetime: Safetalk practices in Peruvian and South African classrooms. In M. Heller & M. Martin-Jones (Eds), Voices of authority: Education and linguistic difference (pp. 31-56). London: Ablex Publishing.

Hornberger, N.H. & Skilton-Sylvester, E. (2000). Revisiting the continua of biliteracy: International and critical perspectives. Language and Education: An International Journal, **14/2**, 96-122.

Howie, S., Venter, E., Van Staden, S., Zimmerman, L., Long, C., Scherman, V. & Archer, E. (2007). Progress in International Reading Literacy Study 2006 summary report: South African Children's reading literacy achievement. Pretoria: University of Pretoria (Centre for Evaluation and Assessment).

Hugo, A.J. (2011). Attending to the classroom practice of a group of Grade 1 teachers to address reading problems. Mousaion, **29(3)**, 266-281.

Hugo, A.J. (2014). Acquiring reading skills in English as second language: Listening to the voice of Grade 1 teachers in South Africa. International Journal of Education in Science, **6**, 317-323.

Hymes, D.H. (1977). Foundations in sociolinguistics: An ethnographic approach. London: Tavistock.

Ikome (Somo), L.B. (2010). Investigating the English language proficiency of Grade 4 pupils in two contexts. Unpublished master's dissertation, University of Pretoria, Pretoria.

Jansen, J.D. (2005). Does Money Matter? Towards an explanation for the relationship between spending and performance in education in South Africa. Paper presented to the Institute for Justice and Reconciliation as part of the Socio-Economic Audit, Pretoria, South Africa.

Janks, H. (2010). Literacy and power. New York: Routledge.

Jordaan, H. (2011). Language teaching is no panacea: A theoretical perspective and critical evaluation of language in education within the South African context. South African Journal of Communication Disorders, **58**, No 2, 79. doi: 10.4102/sajcd.v58i2.29 (retrieved 22 March 2012, http://www.sajcd.org.za/index.php/SAJCD/article/view/63/43).

Khumalo, G. (2008). Education strategy to address poor literacy in Gauteng. Retrieved November 12, 2008, from http://www.buanews.gov.za.

Kioko, A., Ndung'u, R., Njoroge, M. & Mutiga, J. (2014). Mother tongue and education in Africa: Publishing the reality. Multilingual Education, **4:**18 DOI: 10.1186/s 13616-014-0018-x (retrieved2014; http://www.multilingual-education.com/content/4/1/18).

Kohler, S. (2008). Pursuing the right to education. Craemer Media's Research Channel Africa, **July**, 1–6.

Kolodkina, E. & Tan, P.J.B. (2008). The influence of the dominant linguistic paradigm on language teaching. Research Journal of Social Sciences, **3**, 29-32.

Krashen, S. (1981). Second language acquisition and second language learning. Oxford: Pergamon Press.

Kuhn, T. (1962). The structure of scientific revolutions. Mass: MIT Press.

Kumaravadivelu, B. (1994). The postmethod condition: (E)merging strategies for second/foreign language teaching. TESOL Quarterly, **28**, 27–48.

Kumaravadivelu, B. (2003). Beyond methods. New Haven: Yale University Press.

Kumaravadivelu, B. (2006). Understanding language teaching: From method to postmethod. Mahwah, NJ: Lawrence Erlbaum.

Lafon, M. (2008). Asikhulume! African Language for all, a powerful strategy for spearheading transformation and improvement of the South African education system, (*Nouveaux Cahiers de l'Ifas n°11*), pp. 34-59. (See http://halshs.archives-ouvertes.fr/halshs-00339063/fr/ & http://africavenir.com/news/2008/12/2227/michel-lafon-asikhulume-african-languages-for-all)

Lafon. M. (2013). 'Translanguaging' a harbinger of language and cultural loss in Africa? The central role of schools in the transmission of standard forms of African languages? In W. Adegbite, A. Agunsiji & O. Taiwo (Eds), Linguistics and the Glocalisation of African languages for sustainable development. A Festschrift in honor of Pr Kola Owolabi (pp. 74-92). http://halshs.archives-ouvertes.fr/halshs-00874904

Lafon, M. (2014). The vexed question of African languages in education. Still a solution may lay in front of us. Revisiting orality for an authentic African future. Current Research in African Studies, 183-208 (Papers in Honour of Mwalimu Dr Eugeniusz Rzewuski, Iwona Kraska-Szlenk and Beata Wojtowicz, Warsaw).

Lafon, M. & Webb, V. (Eds). (2008). The standardisation of African Languages: Language political realities. Johannesburg: IFAS. (Institut Français d'Afrique du Sud/IFAS Working Paper Series. No. 11, August 2008)

Lahey, (1988). Language disorders and language development. New York: Macmillan Publishing.

Larsen-Freeman, D. (2000). Techniques and principles in language teaching. (2nd ed.). Oxford: Oxford University Press.

Larsen-Freeman, D. & Long, M.H. (1991). An introduction to second language acquisition research. New York: Longman.

Lerner, G.H. (1991). On the syntax of sentences in progress. Language in Society, **20**, 441-458.

Lerner, G.H. (1994). Responsive list construction: A conversational resource for accomplishing multifaceted social action. Journal of Language and Social Psychology, **13(1)**, 20-33.

Lerner, G.H. (1996). On the place of linguistic resources in the organization of talk-in interaction: "Second person" reference in multi-party conversation. Pragmatics, **6**, 281-294.

Leontiev, A.N. (1972). Activity and consciousness. Voprosyfilosofii, **12**, 129-140. (for English version: "Philosophy in the USSR: Problems of dialectical materialism", (1977), Moscow (pp. 180-202) (www/revistadialextus.ufc.br).

Ling, D. (1978). Cumulative record of speech skill acquisition. Washington, DC: Alexander Graham Bell Association for the Deaf.

Macdonald, C.A. (1990). Crossing the threshold into Standard 3 in black education – the consolidated main report of the Threshold Project. Pretoria: HSRC.

Magnussen, J.E. & Stroud, C. (2012). High proficiency in markets of performance: A sociocultural approach to nativelikeness. Studies in Second Language Acquisition, **34**, 321-345.

Marantz, A. (2005). Generative linguistics within the cognitive neuroscience of language. Linguistic Review, **22**, 429-445.

Mbodj-Pouye, A. & Van den Avenne, C. (2007). This is Bambara and French mixed Language and Society, **120**, 99-127.

Mead, G.H. (1934). Self and society. Chicago: University of Chicago Press.

Mercer, N. (1995). The guided construction of knowledge: Talk amongst teachers and learners. Clevedon: Multilingual Matters.

Miller, A. (2012). Child second language acquisition: What do we know? Columbia (University): Teachers College (Working papers in TESOL & Applied Linguistics, Vol. **12**, Nr. 1, pp. 18-34).

Mokolo, M.F. (2014). An investigation into patterns of translanguaging in classrooms in the Foundation Phase in a primary school in the Limpopo Province. Unpublished master's mini-dissertation, University of Limpopo, Polokwane.

Mourshed, M., Chijioke, C. & Barber, M. (2010). How the world's most improved school systems keep getting better. London: McKinsey & Company.

Mphahlele, E. (2004). Es'kia continued. Johannesburg: Stainbank & Associates.

Mphahlele, T. (2012). Applying Hornberger's Continua of Biliteracy framework to the PRAESA video *Feeling at home with literacy*. Unpublished honours dissertation, University of Limpopo, Polokwane.

Muller, J. (2012). The body of knowledge/le corps du savoir. Paper presented at the Seventh International Basil Bernstein Symposium, Aix-en-Provence, 28 June – 1 July 2012.

Ndhlovu, F. (2013). Beyond neo-liberal instructional models: Why multilingual instruction matters for South African skills development. International Journal of Language Studies, **7(3)**, 35-58.

NEEDU (National Education Evaluation and Development Unit). (2013/2012). The state of reading in Grade 5 in selected rural primary schools. Pretoria: NEEDU (DBE).

Nelson, M.E. & Kern, R. (2012). Language teaching and learning in the postlinguistic condition? In L. Allsagoff, S.L. McKay, G. Hu & W.A. Renandya (Eds). Principles and practices for teaching English as an international language (pp.47-66). New York: Routledge.

Ouane, A. & Glanz, C. (2010). Why and how Africa should invest in African languages and multilingual education: An evidence- and practice-based policy advocacy brief. Hamburg: UNESCO.

Owen-Smith, M. (2011). A multi-bilingual approach to teaching Foundation Phase (Grades 1-3) numeracy. Paper presented at the 8th LOITASA Workshop held at the University of the Western Cape (UWC), Cape Town 28-30 March 2011.

Owen-Smith, M. (2012). Overcoming inequality in South Africa through *multi-bilingual* education: A set of teaching methodologies. Paper presented at the Strategies of Overcome Poverty & Inequality Conference "Towards Carnegie III" held at the University of Cape Town (UCT), Cape Town, 3-7 September 2012.

Owen-Smith, M. (2013). Multi-bilingualism in Foundation Phase Numeracy. In Z. Desai, M. Qorro & B. Brock-Utne (Eds), In The role of language in teaching and learning Science and Mathematics (pp. 85-102). Somerset-West, South Africa: AfricanMinds.

Pennycook, A. & Makoni, S. (2006). Disinventing and reconstituting languages. Cleveland UK: Multilingual Matters.

Piaget, J. (1926). The language and thought of the child. New York: Harcourt Brace & Company.

Piaget, J. (1973). To understand is to invent: The future of education. New York: Grossman Publishers.

Plüddemann, P. (2011). Crossing new frontiers with the translanguaging wagon. LEAPNews, **29**, 10–11.

Plüddemann, P. (2014). Implications for teacher education and materials development (including translation). Presentation at the Government Cluster Policy Workshop on "Bi-literacy and multilingualism in schools: Managing learning and teaching in the local and international languages", CSIR Conference Centre, Pretoria, 20 February 2014.

Prabhu, N.S. (1987). Second language pedagogy. Oxford: Oxford University Press.

Pretorius, E.J. (2008). What happens to literacy in (print) poor environments? Reading in African languages and school language policies. In M. Lafon & V. Webb (Eds), Standardisation of African languages in South Africa (Proceedings of CentRePol/IFAS Workshop, University of Pretoria, 29 March 2007) (pp. 60-88). Johannesburg: Institut Français d'Afrique du Sud (IFAS). (www.ifas.org.za/research)

Pretorius, E.J. & Mokhwesana, M.M. (2009). Putting reading in Northern Sotho on track in the early years: Changing resources, expectations and practices in a high poverty school. South African Journal of African Languages, **1**, 54-73.

Pylkkänen, L., Brennan, J. & Bemis, D.K. (2011). Grounding the cognitive neuroscience of semantics in linguistic theory. Language and Cognitive Processes, **26**, 1317-1337.

Ramani, E. (1987). Theorising from the classroom. English Language Teaching Journal, **41/1**, 3-11.

Ramani, E. & Joseph, M. (2014). The status (contents and implementation) of Language in Education Policy (LiEP), Curriculum and Assessment Policy Statements (CAPS) and the (draft) Incremental Introduction of African Languages Policy (IIALP). Presentation at the Government Cluster Policy Workshop on "Bi-literacy and multilingualism in schools: Managing learning and teaching in the local and international languages", CSIR Conference Centre, Pretoria, 20 February 2014.

Reeves, C., Heugh, K., Prinsloo, C.H., Macdonald, C., Netshitangani, T., Alidou, H., Diedericks, G. & Herbst, D.L. (2008). Evaluation of literacy teaching in primary schools in Limpopo Province. Pretoria: Human Sciences Research Council.

Richards, J.C. & Rodgers, T.S. (2001). Approaches and methods in language teaching. (2nd ed.). Cambridge: Cambridge University Press.

Rivet, A.E. & Krajcik, J.S. (2008). Contextualising instruction: Leveraging students' prior knowledge and experiences to foster understanding of middle-school science. Journal of Research in Science Teaching **45/1**, 79-100.

Roodt, M.P. (1993). Fossilization in South African Black English: An investigation by Maria Petronella Roodt. Potchefstroom (South Africa): University of Potchefstroom.

Ruiz, N.T. (1995). A young deaf child learns to write: Implications for literacy development. Reading Teacher, **49**, 206-217.

Salies, T.G. (1998). Pronoun case: Teaching grammar within a communicative paradigm. Classroom / teacher guide. Retrieved on 22 June 2012; http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED424767

Sapir, E. (1985). Culture, language and personality: Selected essays by Edward Sapir. Berkeley: University of California Press.

Schumann, J.H. (2006). Summing up: Some themes in the cognitive neuroscience of second language acquisition. Language Learning, **56**, 313-319.

Shalem, Y. & Slonimsky, L. (2013). Practical knowledge of teaching practice – what counts? Journal of Education, **58**, 67-86.

Silver, R.E. & Lwin, S.M. (Eds) (2014). Language in education: Social implications. London: Bloomsbury.

Sinclair, J.M. & Coulthard, R.M. (1975). Towards an analysis of discourse: The English used by teachers and pupils. London: OUP.

Stenhouse, L. (1975). An introduction to curriculum research and development. London: Heinemann.

Taylor, N. (2007). Equity, efficiency and the development of South African schools. In T. Townsend (Ed.), International handbook of school effectiveness and improvement, Vol. 17 (pp. 523–540). Dordrecht: Springer.

Taylor, N. (2012). National Education Evaluation and Development Unit (NEEDU) national summary report. Pretoria: South Africa.

Taylor, N., Muller, J. & Vinjevold, P. (2003). Getting schools working: Research and systemic school reform in South Africa. Cape Town: Maskew Miller Longman.

Taylor, N., Van der Berg, S. & Mabogoane, T. (2013a). What makes schools effective? Report of Africa's National School Effectiveness Study. Cape Town: Pearson Education.

Taylor, N., Van der Berg, S. & Mabogoane, T. (2013b). Context, theory, design. In N. Taylor, S. Van der Berg & T. Mabogoane (Eds.), Creating effective schools (pp. 1-30). Cape Town: Pearson Education South Africa.

Truax, R.R., Sue Fan Foo & Whitesell, K. (2004). Literacy learning: Meeting the needs of children who are deaf or hard of hearing with additional special needs. Volta Review, **104**, 307-326.

Van Lier, L. (1988). The classroom and the language learner: Ethnography and second- language classroom research. London: Longman.

Van Staden, S. & Howie, S. (2012). Reading between the lines: Contributing factors that affect Grade 5 students' reading performance across South Africa's 11 languages. Educational Research: An international journal of theory and practice, **18**, 85-98.

Vermeulen, M. (2001). Language of teaching and learning (LoLT): Perceptions of teachers in the Vaal Triangle. South African Journal of Education, **19**, 133-146.

Vorster, C., Mayet, A. & Taylor, S. (2013). The language of teaching and learning in South African schools. In N. Taylor, S. Van der Berg & T. Mabogoane (Eds.), Creating effective schools (pp. 135-156). Cape Town: Pearson Education South Africa.

Vygotsky, L.S. (1934/1962). Thought and language. Massachusetts: MIT Press.

Vygotsky, L.S. (1987). Thinking and speech. In R.W. Rieber & A.S. Carton (Eds), The collected works of L.S. Vygotsky (Vol 1): Problems of general psychology (pp. 243-285). New York: Plenum.

Warford, (2011). (2011). Narrative language pedagogy and the stabilization of indigenous languages. Reading Matrix: An International Online Journal, **11(1)**, 76-88.

Webb, V. (2002). Language in South Africa: The role of language in national transformation, reconstruction and development. Amsterdam: John Benjamins. (Series: Impact: Studies in language in society; Vol. 14)

Webb, V. (2006a). Framework for an investigation into the status of the standard varieties of South Africa's African languages. In: V. Webb, A. Deumert & B. Lepota (Eds). The standardisation of African languages (pp. 17-31). PanSALB Occasional papers.

Webb, V. (2006b). The role of language standardisation in the effective development of communities in public life in SA. In: V. Webb, A. Deumert & B. Lepota (Eds) The standardisation of African languages (pp. 35-42). PanSALB Occasional papers.

Webb, V. (2007). The sustainability of South Africa's pluralist language policy. Festschrift for Sammy Beban Chumbow. (Pretoria: CentRePol / University of Pretoria.)

Webb, V., Deumert, A. & Lepota, B. (Eds) (2006). The standardisation of African languages. PanSALB Occasional papers. 161 pp.

Webb, V. & Du Plessis, T. (Eds). (2006). The politics of language in South Africa. Pretoria: Van Schaik.

Webb, V. & Du Plessis, T. (Eds) (2008). Language policy in higher education. Supplementum. Southern African Linguistics and Applied Language Studies , 26(3), suppl/(iii-xii).

Webb, V. & Lafon, M. (Eds) (2008). The standardisation of African languages: Language political realities. IFAS Working Papers Series, 11.

Webb, V., Lafon, M. & Pare, P. (2010). Bantu languages in education in South Africa: An overview. akekho, akekho! the absentee owner. Language Learning Journal, **38**, 273-292.

Wegerif, R. & Mercer, N. (1997). A dialogical framework for investigating talk. In R. Wegerif & P. Scrimshaw (Eds), Computers and Talk in the Primary Classroom (pp. 49-65). Clevedon: Multilingual Matters

Western Cape Education Department. (2006). WCED Literacy and Numeracy Strategy 2006 – 2016: A strengthened, co-ordinated and sustainable approach. Cape Town: WCED.

Whong, M. (2013). A linguistic perspective on communicative language teaching. The Language Learning Journal, **41**, 115-128.

Whorf, B.L. (1956). Language, thought, and reality. Cambridge: MIT Press.

Wolf, M. (2007). Proust and the squid: The story and science of the reading brain. New York: HarperCollins.

Yaman_Ntelioglou, B., Fannin, J., Montanera, M. & Cummins, J. (2014). A multilingual and multimodal approach to literacy teaching and learning in urban education: A collaborative enquiry project in an urban inner city elementary school. Frontiers in Psychology (Front. Psychol.), **5**, 533, doi:10.3389/fpsyg.2014.00533.

Recommended / relevant further reading (not cited in report in support of specific contents)

Al-Samarrai, S. (2002). Achieving Education For All: How much does money matter? (Working Paper 175). Sussex: Institute of Development Studies.

Blok, H., Sleegers, P., & Karsten, S. (2008). Looking for a balance between internal and external evaluation of school quality: Evaluation of the SVI model. Journal of Education Policy, **23**, 379–395.

Bloom, B., Englehart, M., Furst, E., Hill, W. & Krathwohl, D. (1956). Taxonomy of educational objectives: The classification of educational goals. (Handbook I: The cognitive domain). New York: David McKay.

Brown, H.D. (1994). Principles of language learning and teaching. (3rd ed.) Englewood Cliffs, NJ: Prentice Hall Regents).

Carstens, A. (1997). Issues in the planning of a multilingual dictionary of Chemistry for South African Students. In: Van Schalkwyk, D.J. (Ed.). Lexikos 7 (pp. 1-24). Stellenbosch: Bureau of the WAT.

Carstens, A. (1998a). On justifying the compilation of a multilingual explanatory dictionary of chemistry. South African Journal of Linguistics, **16(1)**, 1-6.

Carstens, A. (1998b.) The compilation of a multilingual special-field dictionary for pedagogical purposes. Kotze, E.F. (Ed.). SA Linguistics 1997. Papers delivered at the 33rd Annual Conference of the Linguistic Society of Southern Africa held at the University of Natal, Durban, 2-4 July 1997.

Carstens, A. (1998c). Winter School in Terminology and Terminography. In: Kotze, E.F. (Ed.). SA Linguistiek 1997 / SA Linguistics 1997. Papers delivered during the 33rd Annual Conference of the Linguistic Society of Southern Africa held at the University of Natal, Durban, 2-4 July 1997.

Carstens, A. (1999.) Science through Sepedi – is terminologisation a worth-while venture? In: C.J.M.D. Du Plessis (Ed.). Lexikos 9 (pp. 1-17). Stellenbosch: Bureau of the WAT.

Carstens, A. (2001). The problem-solving potential of text evaluation - Examination papers in the spotlight. Document Design, **2(2)**, 135-151.

Carstens, A. (2004). Improving the Quality of Examination Papers: Perspectives from Document Design. In: M. Kriel (Ed.). The Language Web/Fyn Net van die Woord. Essays in Honour of Victor Webb (pp. 187-216). Port Elizabeth. University of Port Elizabeth.

Chisholm, L., Hoadley, U., wa Kivilu, M., Brookes, H., Prinsloo, C.H., Kgobe, A., Mosia, D., Narsee, H., & Rule, S. (2005). Educator workload in South Africa: Report funded by and prepared for the Education Labour Relations Council. Cape Town: HSRC Press.

Courtney, J. (2008). Do monitoring and evaluation tools, designed to measure the improvement in the quality of primary education, constrain or enhance educational development? International Journal of Educational Development, **28**, 546–559.

Creemers, B.P.M., & Reezigt, G.J. (2005). Linking school effectiveness and school improvement: The background and outline of the project. School Effectiveness and School Improvement, **16**, 359–371.

Department of Education. (2005a). National Policy on the conduct, administration and management of the National Senior Certificate: a qualification at Level 4 on the National Qualification Framework (NQF). Pretoria: Department of Education.

Department of Education. (2005b). The National Senior Certificate: A Qualification at Level 4 on the National Qualifications Framework (NQF). Pretoria: Department of Education.

Econometrix. (2007). Employment equity and the skills shortage: Myths and realities. Econometrix Ecobulletin, 23 July 2007 (Also at http:/www.econometrix.co.za; No 15107/0719).

Fullan, M. (1993). Change forces: Probing the depths of educational reform. London: Taylor & Francis.

Heneveld, W. & Craig, H. (1996). Schools count: World Bank project designs and the quality of primary education in sub-Saharan Africa (Technical Paper Nr 303; Africa Technical Department Series). Washington: The World Bank.

Heugh, K., Diedericks, G.A.M., Prinsloo, C.H. & Herbst, D.L. (2007). Assessment of the Language and Mathematics skills of Grade 8 learners in the Western Cape in 2006. Pretoria: Human Sciences Research Council. (Also available at: (http://busdats.hsrc.ac.za/RMS/search/outputDetail.php?formno=31&id=3164)

Howie, S. (2002). English language proficiency and contextual factors influencing Mathematics achievement of secondary school pupils in South Africa. Enschede: University of Twente (doctoral dissertation).

Kallaway, P. (2002). The history of education under apartheid 1948-1994. New York: Peter Lang. (Vol. 28 in Series: History of Schools and Schooling, A.R. Sadovnik & S.F. Semel, Eds.)

Kanjee, A., & Prinsloo, C.H. (2005). Improving learning in South African schools: The Quality Learning Project (QLP) summative evaluation (2000 to 2004). Pretoria: HSRC.

Kanjee, A., Paterson, A., Prinsloo, C., Khosa, G. Moore, A., Kivilu, M., & Pheiffer, C. (2001). Improving learning in South African schools: The Quality Learning Project baseline evaluation. Pretoria: Joint Education Trust/Human Sciences Research Council.

Kanjee, A., Prinsloo, C.H., Khosa, G., & Reddy, V. (2003). Improving learning in South African schools: The Quality Learning Project mid-term evaluation. Pretoria: HSRC.

Keto, T.C. (1977). Race relations, land and the changing missionary role in South Africa: A case study of the American Zulu Mission 1850-1910. International Journal of African Historical Studies, **10**, 600-627.

Kieman, M. (2003, September). Targets for minimum quality basic education – Can we define minimum quality, provide it, measure it and compare it? Or, can one fast track quality? Paper presented at the Conference on Education and Development, Oxford, UK (9–11 September 2003).

Lafon, M. (2004). Expert report - Programme pilote d'Education Bilingue au Mozambique, Visite de classes bilingues dans les provinces du Niassa et de Cabo Delgado & - Evaluation d'ensemble du programme (Expert assessment – Pilot program - Bilingual Education, Mozambique – visits to bilingual classes in Niassa & Cabo-Delgado, general assessment of the program) Maputo. (See http://halshs.archives-ouvertes.fr/halshs-00184986/fr/)

Lafon, M. (1995). Le Shona & les Shonas du Zimbabwe (*Shona language and people from Zimbabwe*): Information on Shona language and culture. Gweru: Mambo Press & Paris: l'Harmattan. (See www.bibliomonde.net + Lafon.)

Lafon, M. (2006). Linguistic diversity in South-Africa: Will a historically divisive factor become a hallmark for transformation? - extended translation of 2004, *De la diversité… Cahiers de l'Ifas n°8 online*. (See www.ifas.org.za/research & http://halshs.archives-ouvertes.fr/halshs-00120396)

Lafon, M. (2008a). Mozambique, vers la reconnaissance de la réalité plurilingue par l'introduction de l'éducation bilingue (Mozambique, bilingual education as an acknowledgment of the multilingual reality), in Langues, Cultures et Développement, H. Tourneux dir., 217-250. (See http://halshs.archives-ouvertes.fr/halshs-00315939/fr/)

Lafon, M. (with Chimhundu Hebert et al.) (1996). Duramzwi rechiShona. Harare: College Press (first monolingual Shona dictionary). (See http://www.dokpro.uio.no/allex/gsd/fm/1-frontpage.htm)

Lafon, M. (with Gandija Daniel et al.) (2000). Bhuku rekudzidza kunyora nekuverenga peciNdau or Manualinho de alfabetizacao em lingua Ndau de Mossurize, (literacy manual in Mossurize Ndau). Maputo and Harare: Lafon.

Lafon, M. (with Gandija Daniel et al.) (2001). Pamberi nekudzidza, school primer in Mossurize Ndau, Espungabera.

Macdonald, C.A. (2008a.) An analysis of Foundation Phase materials for L1, L2, Life Skills and Numeracy. Pretoria: Human Sciences Research Council.

Macdonald, C.A. (2008b.) An analysis of Grade 4 Natural Sciences and Human and Social Sciences texts and a comparison between Grades 3 and 4. Pretoria: Human Sciences Research Council.

Metcalfe, M. (2008, January 2008). Why our schools don't work. Sunday Times, p. 10.

Mullis, I.V.S, Martin, M.O., Kennedy, A.M., & Foy, P. (2007). Progress in International Reading Literacy Study (PIRLS) 2006: International Report. Chestnut Hill: Boston College.

OECD. (2008). Reviews of national policies for education: South Africa. Paris: OECD Publishing. (Also available at www.sourceoecd.org/education/9789264053489)

Pare, P. & Webb, V. (Eds) (2007). Report on the national Department of Education research project: The impact of translated papers in the national Grade 12 examinations into the nine official African languages of South Africa. Pretoria: DoE.

Pavlenko, A., Bell, N.D., Odlin, T., Barkhuizen, G. & Pomerantz, A. (2008). Book reviews, International Journal of Bilingual Education and Bilingualism, **11**, 735-754. (Book) Ringborn, H. (2007.) Cross-linguistic similarity in foreign language learning. Clevedon: Multilingual matters.

Pillay, M. (2009.) An investigation into the languages of learning and teaching in schools. Johannesburg: Witwatersrand Education Policy Unit. (This report is still not public.)

Prinsloo, C.H. (2003). Grade 12 results of QLP schools: Supplement to the QLP Mid-term Evaluation (2002/2003). Pretoria: HSRC.

Prinsloo, C.H. (2008). Extra classes, extra marks? Report on the PlusTime project. Pretoria: Human Sciences Research Council.

Prinsloo, C.H. (2009). The effect of extra classes on the improvement of learner performance after one year: Supplementary Report on the PlusTime Project (Learner Performance on Common Tasks of Assessment). Pretoria: Human Sciences Research Council.

Prinsloo, C.H., & Kanjee, A. (2005). Improving learning in South African schools: The Quality Learning Project (QLP) summative evaluation (2000 to 2004) technical report. Pretoria: HSRC.

Reddy, V. (2006a). Challenges to meet international maths and science standards. HSRC Review, **4(1)**, 8–9.

Reddy, V. (2006b). Mathematics and Science achievement at South African schools in TIMSS 2003. Cape Town: HSRC (Human Sciences Research Council) Press.

Ringborn, H. (2007.) Cross-linguistic similarity in foreign language learning. Clevedon: Multilingual matters. (Review by) Pavlenko, A., Bell, N.D., Odlin, T., Barkhuizen, G. & Pomerantz, A. (2008). Book reviews, International Journal of Bilingual Education and Bilingualism, **11**, 735-754.

Scheerens, J. (2000). Improving school effectiveness. Paris: UNESCO. (Vol. 68 in Series: Fundamentals of Educational Planning)

Setati, M. (2005). Teaching Mathematics in a primary multilingual classroom. Journal for Research in Mathematics Education, **36**, 447–466.

Simkins, C. & Paterson, A. (2005). Learner performance in South Africa: Social and economic determinants of success in language and mathematics. Cape Town: HSRC (Human Sciences Research Council) Press.

Snow, C., Burns, S. & Griffin, P. (Eds.) (1998). Preventing reading difficulties in young children. (A report of the Committee on the Prevention of Reading Difficulties in Young Children, National Research Council

and National Academy of Sciences). Washington, DC: National Academy Press. http://www.nap.edu/readingroom/books/reading/

South-Africa, Government. (1996). Constitution of the Republic of South Africa. Pretoria: Government Printer.

Standard & Poor's. (2005). School Evaluation Services: Analytical framework & methodology. Retrieved March, 2005, from http://www.schoolmatters.com (877.776.6512)

Stiggins, R.J. (2002). Where is our assessment future and how can we get there from here? In R.W. Lissitz & W.D. Schafer (Eds), Assessment in educational reform: Both means and ends (pp. 18-48). Boston, MA: Allyn & Bacon.

Thomas, W. & Collier, V. (2002). A national study of school effectiveness for language minority students' long-term academic achievement. Santa Cruz, CA and Washington, DC: Center for Research on Education, Diversity & Excellence. (http://www.crede.org/research/llaa/l.les.html [31 May 2005].)

Tong, F., Lara-Alecio, F., Irby, B., Mathes, P. & Kwok, O. (2008). Accelerating early academic oral English development in Transitional Bilingual and Structured English Immersion programs. American Educational Research Journal, **45**, 1011-1044.

UNESCO. (2003, 2008, 2009). Sources available on website at http://portal.unesco.org/education, in their 2003 Literacy, a UNESCO perspective booklet, and their 2008 Policy Brief (No 44) on Early Childhood. Paris: UNESCO.

UNESCO. (2004). The plurality of literacy and its implications for policies and programs: Position paper. Paris: United National Educational, Scientific and Cultural Organization (also: unesdoc.unesco.org/images/0013/001362/136246e.pdf)

UNESCO. (2009). *Overcoming inequality: Why governance matters* (EFA (Education for All) Global Monitoring Report 2009). Paris: UNESCO (United Nations Educational, Scientific and Cultural Organization).

Vawda, A.Y. & Patrinos, H.A. (1998). Cost of producing educational materials in local languages. Washington DC: World Bank.

Webb, V. & Kembo-Sure, K. (2000). (Eds) African Voices. An introduction to the languages and linguistics of Africa. Cape Town: Oxford University Press Southern Africa.

Annexure 1: Summarised information on students' bursary-funded post-graduate work[67]

Puleng Mathekga: BA CEMS; University of Limpopo; Prof E Ramani; 2009 -2011

Ms Mathekga completed her final year of the BA CEMS course (UL's dual-medium degree) with NRF bursary assistance. Her research assignment in a Limpopo school covered the question of the language development paradigm that the school followed, being either reading readiness or emergent literacy. The validity of two assumptions was interrogated too: was there an age (6?) after which learners are ready for becoming literate, or is there a continuum specific to each individual? Other questions related to whether primary school education is really bilingual, learning materials are sufficient (to ensure a print-rich experience), overcrowding, and age-appropriate practices. Her sample involved the teacher and learners from one Grade 3 class in a single school. Data-collection occurred using a formal instrument for teachers, but informal discussions with learners during breaks.

Main findings included: the existence, but poor use (being stacked away or hidden), of lots of Sepedi materials; the focus on learner-centred teaching (mainly implemented by having individual learners respond in front of the class, who has to agree with or help improve that response); the existence of poor family backgrounds, unable to support homework and reading, e.g., there are many squatters in this township school; and surprisingly high learner performance levels. The student's findings upheld the reading-readiness assumption.

The supervisor guided the student towards: enhanced investigation of the quality of learners' writing in Sepedi; the development and inclusion of a standard set of items in questionnaires to collect contextual and home information; and a better understanding of the culture of squatters, characterised by "day-time survival living".

Tseke Mphahlele: BA Hons (Applied Language and Multilingual Studies); University of Limpopo; Prof E Ramani; 2011-2012

Mr Mphahlele started his Honours degree in Applied Language and Multilingual Studies in February 2011 and completed it during 2012 with NRF bursary support over the two years. He focused on models of bi-literacy development as part of a theoretical investigation. The notion of bi-literacy assumes that one language and literacy is developing in relation to one or more other languages and literacies, as argued by Nancy H Hornberger in 2003.

The motivation for the study came from the need for developing the systematic and appropriate use of both languages in the classroom, backed by appropriate resources, to breach the current gap between languages and modes in practices towards opening access to the curriculum, a point argued by Taylor, Muller and Vinjevold in their 2003 work. In addition, South African education is in crisis and, though bilingualism has been noted as a solution, there is no general consensus on how to implement it best.

The research questions related to finding out more about desirable models for bi-literacy development, and how teachers could best develop bi-literacy in early literacy development. The theoretical foundations for the study was found in the work of the Project for the Study of Alternative Education in South Africa

[67] Citations were left in the contents provided by students. However, the references are not provided in this report.

(PRAESA), the dual-medium degree (BA CEMS) offered at the University of Limpopo, Jim Cummins' models of bilingual education, and the continua of bi-literacy model of Hornberger. The data source was the PRAESA video "*Feeling at home with literacy"*. It captures the social and learning experiences of a six-year old bilingual African language-speaking learner receiving some of her teaching through English. She thus has to navigate across her home and instructional languages. The scenes depicted include being at home (before and after school), in the street, at school / in the classroom, and at the shop. The methodology entailed a contextualised thematic analysis, using Hornberger's framework for the continua of bi-literacy. A salient finding was that the model did explain bi-literacy development well in the context of two languages in use at school, but that it could be enriched by adding a school-home (-social environment) continuum as well.

Abram Mashatole: MA (Translation Studies and Linguistics); University of Limpopo; Prof E Ramani; 2010-2013

Mr Mashatole started his Master's degree in Translation Studies and Linguistics in February 2010 and received bursary support from the NRF during 2011 to 2013 to work on his Master's degree research report, which he completed in June 2013. He theorised conceptualisations of literacy development by studying classroom practice, in particular by exploring teachers' theory revision.

He also had a particular interest in teacher professionalisation. From this perspective, he looked into the kinds of engagement between teachers and researchers (role enrichment) that would bring change in beliefs, practice, etc. (e.g., rote learning, ritualistic repetition), also in connection with curriculum policy requirements, and current levels of proficiency of teachers and learners.

The research investigated literacy practices in learning and teaching encounters and pursued an ethnographic perspective on the relationship between contextual conditions and practices in literacy learning. The study illuminated classroom events and deepened understanding of the relationship between literacy events and literacy acquisition in early childhood development. It also avoided over-reliance on large-scale assessment (e.g., PIRLS and SACMEQ), which cannot say anything about the hidden curriculum. Literacy practices were instead deciphered further from observable "literacy events", in adherence to what Plowman claimed in 2006. The "context of use" led to an enhanced understanding of literacy as a social practice.

The research questions were about: pedagogical practices in learning and teaching; processes of literacy learning and teaching; and the forms of scaffolding used in classrooms. His work followed a case-study design, with a focus on micro-detail that enabled deeper theorising of literacy events and the articulation of contextual mismatches between language policy and practice. It made use of classroom observations, interviews and video and audio data. The sample entailed a Grade 3 Foundation Phase classroom, with a rural socio-economic profile, and children having Sepedi as home language.

The theoretical points of departure were taken from work on emergent literacy (Clay, 1966; Bloch, 2002), continua of bi-literacy (Hornberger, 2000) and Cummins (1996). The significance of the study lied in its clarification of theory, reaching a deeper understanding of 'what takes place' during the learning process, and the articulation of mismatches between language policy and practice.

Loretta Somo: MA (Applied Linguistics); University of Limpopo; Dr N Bosman; 2009 -2011

Ms Somo completed her Master's study in December 2011 at the University of Pretoria, having started in January 2009, and having received NRF student support for her final year. She did a comparison of the English language proficiency of Grade 4 learners, who spoke an African language at home, across their English and Social Sciences (Geography & History) school subjects, serving as two learning contexts. Having returned to Ethiopia after completion of her study, it was not possible to support her intended two-country follow-up and comparative doctoral work by means of another NRF student support grant.

The study was set against the background of how it came about that English had become such an important vehicular language. The relevance of the question was amplified by studying learners from a school from a poor township community (Pretoria/Tshwane), and investigating Heugh's claim that cognitive academic proficiency is put under even greater risk under such circumstances.

Data were collected within a qualitative research design using semi-structured interviews and observations as research tools. An English and Social Sciences teacher and their learners were involved in classroom observation, text-book and work-book analysis, and learner assessment. Two Grade 4 classes were each followed for two weeks. General observations from her analysis and interpretations were made on the teaching strategies and methods used by teachers and the effects of code-switching. She also addressed the effects on learners of an early (and sudden) switch from the home language to English as language of learning and teaching, poor teaching strategies and methods, code-switching as a teaching strategy, and non-conducive learning environments. Key findings were that teachers often adopted code-switching, using illustrations from text books and the chalk board, but that it did not prove to be effective. The main reason, especially in Social Sciences, is that code-switching helps learners' understanding, but they still cannot write. Fewer than 10% of learners achieved at least an average mark. They remain confused about the so-called "wh"-questions (where, when, who, why). Joint reading does not result in proficiency gains for each individual learner. Learners essentially cannot read English. Thirty-minute periods were never enough, and class sizes were perceived to be too large.

Her main conclusion is that the early / abrupt switch from home language to a different LOLT does not work. First-language proficiency is not carried over to a second. Poor teaching strategies and the sub-optimal use of support materials and teaching aids are rife. Her recommendations centred on the better implementation of the mother-tongue-based bilingual system, not allowing code-switching for certain subjects; treating English as foreign instead of second language, introducing subject differentiation (the English teacher specialises in teaching English only and in English, while Sepedi teachers teach all other subjects up to Grade 8, improve the book stocks of school libraries to create a reading culture, having two teachers per class in the Foundation Phase, the availability of reading materials, and improved coordination of in-service training.

During discussions at project working meetings of the implications of this postgraduate study for the present NRF-funded study, interesting issues that were raised included the nature and role of code-switching when between Sepedi-speaking and Zulu-speaking learners, for instance, when being taught through English as medium of instruction, as well as whether or not it would be better to allow code-switching early on while a Sepedi-speaking learner learns English. In the latter instance, the risk was pointed out that learners would get stranded on achieving basic interpersonal communication skills, but not cognitive proficiency (BICS; not CALP). The question was also raised whether mastering the alphabet (in

English) only at Grade 4 level, having neglected doing that in Sepedi already at Grade 1, meant that learners only now in essence switch from oracy to literacy.

The value of the study was further enhanced by the fact that the primary school involved in it served a socio-economically disadvantaged community with most of its learners from desperately poor homes. From personal encounters with some learners and educators, the researcher gathered that some of the pupils came from informal settlements and lived in crowded and squalid conditions. The school had a feeding scheme where about 872 children were fed once a day. For many of these children, this was the only warm meal they got in a day. Learners in this school had different home languages. The school had tried to adapt to its surroundings by dividing the Foundation Phase classes into two streams. Sepedi or isiZulu were the two officials LoLTs from Grade 1 to Grade 3 and from Grade 4 the Sepedi and isiZulu learners were mixed into the same classes. As per DBE policy at the time, English was introduced informally in Grade 1; from Grade 2 it became a subject. In Grade 4 it stayed a subject and also became the LoLT. The home languages as well as English were studied as subjects until Grade 12. Each Grade 4 class had between 55 and 60 learners. Grade 4 learners in township schools are faced with two educational challenges: acquiring English as second language and mastering (amongst other skills) new words in other subjects in a language which is not their mother tongue. The research study explored the strategies / methods teachers of English as a subject in Grade 4 use to help learners support the dual educational challenges of mastering academic content and doing so in a language they are still acquiring. It also examined the function of code-switching on the side of teachers and learners alike in both these learning environments.

The findings revealed that Grade 4 learners experience difficulties acquiring English as second language due to the sudden switch from mother tongue to English as LoLT and poor teaching strategies / methods. The inability of Grade 4 pupils to identify some letters of the alphabet or to differentiate between consonants and vowels is a clear indication that learners do not get enough Mother Tongue Education (MTE) that can permit them to learn a second language (L2). Since a learner's cognitive ability is developed in his mother tongue, the learning of an L2 depends on the maturity of the first language (L1) as foundation (Vermeulen, 2001, Roodt, 1993). The study confirmed that the process of learning to read, for example, is easier if the materials reflect the language of the children (home language) and are therefore meaningful to them. When this is not the case, as observed during the lessons, the learners 'word call' rather than read. In later years memorisation will develop as a coping strategy when the learning materials are not meaningful.

The research also revealed that the insufficient use of teaching strategies by teachers of Grade 4 contributed to the poor performance of the learners. Teachers did not master appropriate methods or strategies that could help learners attain academic language proficiency. There was a total absence of learning aids, class demonstrations or motivation to improve on their teaching strategy. Harmer (1991) suggests that the motivation that learners can receive in class is the biggest single factor affecting their success. Besides the absence of learning aids, the educators themselves were far from proficient in English; as a way out they resorted to code-switching as a teaching strategy.

The findings confirm the fact that code-switching can be used to create a supportive language environment in the classroom but it does not increase language proficiency in learners. When the teacher code-switches to a home language the learners can understand (follow) and a supportive language environment is created in the classroom. The teachers of both English and Social Sciences used code-switching for transferring the necessary knowledge to learners. In this way the learners were able to clarify any misunderstandings of certain words. The study made it clear that code-switching does not increase language proficiency in learners from township schools. Grade 4 learners may make sense of the English class and the content of the Social Sciences class by referring to the mother tongue, but lack the words to give adequate feedback in

English in both these classes - either verbally or when writing. The clarification and confirmation the pupils got when the teacher code-switched did not lead to improved proficiency in English. Consequently, the learners manifested poor academic performance in Grade 4 and indications are that this state of affairs will probably not improve in the years to come until Grade 12. The researcher believes code-switching can help ESL learners to attain BICS which can only be used for communication in informal everyday situations. BICS alone is not sufficient for academic success. When learners do not achieve CALP, they will not be competent enough in English to ensure academic success by the time they finish school.

The study opened new perspectives whereby additive bilingual programs could be introduced in township schools and mother-tongue education be maintained for six to eight years. In addition, English must be added to the curriculum. (This subsequently happened.) Consideration should be given to having two teachers teaching one class in the Foundation Phase. In this case, one teacher will be a specialised English teacher to ensure that the quality of teaching in the English class is of the highest standard possible while the other teacher will teach in the HL. Secondly, coordinated in-service and continuous training for teachers will enable them to stay abreast of teaching methods and strategies that will help improve the language proficiency of the learners. Code-switching can be used as a teaching strategy, but educators should not rely on it to ensure English language proficiency among their learners. The Department of Basic Education should officially acknowledge code-switching and facilitate its use in township schools. In this way a standard on when and how much code-switching can be used during a lesson will be set for the teachers.

Unfortunately the student's intention to pursue a comparative follow-up doctoral study on the effect of different policies and practices in South Africa and Ethiopia was abandoned because her relocation did not allow renewal of her study permit and continued bursary support. The study intended investigating the importance of eight years of MTE in Ethiopia as compared to three years of MTE in South Africa. The study would explore the level of classroom participation in a Grade 5 class in Ethiopia, where mother tongue is used as a medium of instruction, and a Grade 5 class in South Africa, where mother tongue is not used as a medium of instruction. Finally the study would hope to have highlighted how learners from Ethiopia with eight years of mother tongue education can acquire a second or foreign language much more easily and faster than learners from South Africa with just three years of mother-tongue education.

Shawn Rogers: D Phil (Psychology); University of Witwatersrand; Prof H Jordaan; 2012 -current

Ms Rogers's D Phil research proposal was accepted in 2013 by the University of the Witwatersrand as an outcome of being granted NRF bursary support since July 2012 (ongoing into 2015). The title of her study is: "The relationship between bi/multilingualism and cognitive functioning in South African Grade 3 learners". She completed her instrument development and data collection in October 2014 on a sample of approximately 120 Grade 3 learners. The sample consisted of learners from four urban/sub-urban schools in the Gauteng province. Two schools had English as their medium of instruction and isiZulu as the First Additional Language, with the opposite structure in the other two sampled schools. The following assessment instruments were used during the data-collection period: sentence repetition (English and isiZulu), Alloway Working Memory Assessment (AWMA), the Executive Functioning subtests of the NEPSY and finally, the Early Grade Reading Assessments (EGRA) (English & isiZulu). Where the tests were unable to be translated, the instructions were given to the learners in both English and isiZulu and they were able to respond in either language. Furthermore, school, teacher and home background questionnaires were completed. The data are currently being captured and cleaned, and this will be followed by the analysis and thesis writing. The expected completion date for the PhD thesis is early in 2016.

Learning English is assumed to have both economic and social benefits. However, the failure to use learners' home languages as a medium of instruction has contributed to the poor academic performance and high dropout rates in South Africa. Previously, little importance has been attributed to linguistic and psycholinguistic factors influencing learners' performance, which has now become a highly contested issue in educational research. In order to explore this controversial topic, the proposed research inspects different theoretical and practical aspects of the issue.

Her study focuses on the link between multilingualism and cognitive development. More specifically, her study is on language acquisition, in particular the interaction between first- and second-additional language as forms of mono-, bi- or multilingualism and their effect on levels of language proficiency, hemispheric (left, right, lateralised) and cognitive processing, and problem solving. Also factored in is the age of language acquisition and English-speaker status (1st or 2nd language).

Firstly, the research aims to focus on how the differing levels of language proficiency impact on modes of cognitive processing (executive control and working memory) and how this could impact academic performance. Secondly, the research aims to investigate Cummins' Interdependence Hypothesis within a South African setting. Cummins argues that low functional bilingualism impacts on overall academic achievement and leads to inadequate command of both the Home/First language (L1) and Second / Additional Language (L2). In so doing, this research intends to recommend innovative pedagogical practices. By better understanding the impact of the variations in cognitive processing and by adapting the pedagogical practices, it is hoped that learners would be able to overcome any constraints they may face in the current education system and improve their academic performance.

Mafeye Morapedi: BA Hons (Applied Language and Multilingual Studies); University of Limpopo; Prof E Ramani; 2011-2012

Mr Morapedi engaged in the empirical part of his work on education language policy development at a Limpopo school towards his BA Honours dissertation in Applied Language and Multilingual Studies. He studied from 2011 to 2012, but received NRF bursary support only during 2012. The study explored the effects of language policy by investigating which learning materials were available in a Limpopo township school and how teachers and learners used the available textbooks.

The study was perceived as crucial to the development and implementation of multilingual education, change in people's perceptions, retrieval of the prestige / status of learning, and reduction of the hegemony of English. The research was premised on schools' jurisdiction over their choices about language use, as based on LiEP. In terms of the latter, the absence of provincial LiEPs, even provincial development or literacy strategies in some cases, was bemoaned. The research questions covered the existence of a language policy at the selected school, how that whole process evolved, the role played by all the people involved (i.e., principal, teachers, learners, SGB and other stakeholders), the processes followed in implementing the language policy, its visibility, and the extent of matching or mismatching between practice and the language policy.

The research design featured a case study of a Sepedi-dominated township school, and implemented mixed methods for data collection and analysis, among these interviews and questionnaires with current and former students and SGB members, and teachers.

The study highlighted the value of comparing existing language policy at a given school against the given standard. A comparison was provided of the intended and actual situation at the school. Being responsive to community needs was found to be an important factor. The study added further value by also including elements of curriculum policy, and how well respondents knew it, amidst another period of curriculum change.

Mapelo Tlowane: MA (Applied Linguistics); University of Limpopo; Prof E Ramani

Ms Tlowane, as UL staff member, and therefore without NRF support, engaged in a Masters' dissertation on the implications of private speech research for Foundation Phase literacy development. The purpose of the study was to investigate the use of private speech (talking to oneself) among Sepedi children. Research questions related to its occurrence among Sepedi children, its emotive and cognitive role during task performance, conditions enhancing its likelihood, and its link to task outcomes and quality.

It was difficult to obtain a sample of such behaviours, as they could not be structured or predicted. Also, valid responses could not be obtained through artificial sessions, which required only working in naturalistic settings, such as free play. The student also pursued linking private speech to later literacy development, for instance with regard to how it could serve as practice for "real" communication. The value of the study for the NRF project (albeit not involving formal NRF student support) further lied in getting a sense of the nature and value of pre-school activities and behaviours, not yet inhibited by formal schooling. Further explorations covered the extent to which formal education does or should be allowed to inhibit private speech, and the latter's role in aiding problem solving. In this regard, the Vygotsky-based point of departure of Douglas Barnes ("exploratory speech" - sometimes in the same speech event as communicative speech), was considered particularly helpful, conceptually. Video recording was found to be an absolutely necessary requirement for data collection.

France Mokolo: MA (Translation Studies and Linguistics); University of Limpopo; Prof E Ramani; 2012 - 2014

Mr Mokolo undertook a Master's degree, receiving two years of NRF bursary support (2013-2104), in Translation Studies and Linguistics at the University of Limpopo. He registered during 2012 and completed his study in 2014. He "sought to investigate the patterns of translanguaging in classrooms in the Foundation Phase in a primary school in the Limpopo province" (Mokolo, 2014, p.5), and included Sepedi home-language and English first-additional language lessons. He also explored teacher awareness of the value of translanguaging as teaching method, conceptual development, and the roles of transliteration and code-switching.

Mr Mokolo undertook a qualitative study. "The aim of the study was to investigate the ways in which translanguaging is used by teachers and learners …. The research focuse(d) on how Grade 1 and Grade 3 learners and their teachers engage with texts and the strategies that teachers use to promote the use of two languages in classrooms to help learners to understand content and concepts in English and Sepedi. An innovative element of the research was the intervention teaching done by university lecturers to provide alternate practices for regular teachers in the school to discuss and engage with.

The data collection instruments included classroom observations, audio and video recordings, interviews with the class teachers and a focus group discussion between the teachers. The data analysis involved

identifying all instances of translanguaging that occurred in the lessons and to explore in what ways they facilitated learning. The results showed that hardly any translanguaging took place in the regular lessons and teachers seemed to be operating with a monolingual consciousness. Teachers also revealed in the focus group discussion that the Curriculum and Assessment Policy Statement (CAPS) required them to keep the two languages apart and not to use both of them in lessons. In the intervention lessons, however, there were some examples of translanguaging, which seemed to facilitate interaction and greater participation from the learners." (Mokolo, 2014, p.5).

The study also found that conventional teachers adhere to traditional and dominant classroom practices to such an extent that learners are not challenged to the capacity of their linguistic or cognitive meaning-making abilities. The metalinguistic awareness prominent among truly bilingual learners was therefore absent among these learners, who were not guided towards using their home-language ability and knowledge more widely, and therefore also were deprived from any associated competency, fluency, knowledge and confidence gains. Teacher-centred teaching was found to explain partially why the potential value of using additional language resources was not recognised and capitalised on. This would also explain why mother-tongue teaching *per se* does not guarantee good education, especially when accompanied by too little opportunity to engage in extended writing, for instance. Learners from the intervention lessons, though, benefited from increased peer interaction and the mutual cross-language translations, interactions and other assistance where bilingual resource use was exercised, a practice that was also recommended by the student, in particular when structured to foster higher-order thinking and problem-solving skills.

Besides further research on the matter, professional development was recommended to assist teachers in the practical implementation of strategies towards achieving multilingualism and bi-literacy.

Sibongile Bopape: MA (English); University of Limpopo; Prof E Ramani; 2012 -current

Ms Sibongile Bopape registered during 2012 and received an NRF grant from 2012 to 2013 for her Master's study in English. She focuses on the "triadic" dialogue evident in the I-R-F (Initiation, Response, Feedback) structure in different classroom settings in a Limpopo township school. (The study is still being completed owing to the influence of special family circumstances).

Ms Bopape, in preliminary analysis of classroom interaction during regular lessons, found that the feedback component is very seldom present, as the teaching strategy followed by teachers hardly includes giving tasks to learners that would require it. An example would be expecting learners to read silently by themselves while the teacher reads aloud. The learner's action in itself can also not be monitored at all.

Annexure 2: Protocol ("questionnaire") used for teacher interviews

Semi-structured Teacher Interview Schedule

NRF-funded study on
"Paradigms and practices of language teaching and learning in primary schools in Gauteng and Limpopo"

Following-up on classroom observations of 2011 and 2012.
Involving only teachers whose lessons got observed and video recorded.
Covering the following components:
- **Confirmation of demographic and background information**
- **Literacy and language teaching practice and related topics**
- **Language policy and its implementation.**

Section 1: Demographics (teaching qualifications, experience, obligations and related background)

1.1 What is your mother tongue / home language? (*Do they differ in your case? How competent are you in reading, speaking and writing your mother tongue / home language?*)

1.2 Which languages are you proficient in? (*Note how well you can read, write and speak each of them.*)

1.3 Which grade/s, phase/s and subject/s did you have to teach at the time of the lesson observation? (*Note changes since / immediately before that. Teaching load (lessons per week, learner numbers)?*)

1.4 What were your teaching subjects / majors during your teacher training? (*And for any other studies?*)

1.5 Which formal teacher training qualification/s have you obtained? (*And any other qualification/s?*)

1.6 Where did you receive your teacher training? (*Specify the institution, city, province and country.*)

1.7 How long have you been teaching? (*Differentiate in terms of language and other subjects, grade levels taught at, and durations at your present and previous school/s.*)

1.8 Have you received training to teach the CAPS* curriculum implemented since 2012? (*Have you received training to teach according to the GPL(N)S*, as applicable (Gauteng only)? And in the NCS* in 2011 and immediately before? Provide as much detail as you can about topics, contents and course durations.*)

1.9 What is the language profile of learners and parents in your school's feeding area? (*Which home and additional language/s are learners exposed to, and how much: (a) at home, and (b) in their broader environment? Who do they live with? Socio-economic status level? Parent involvement?*)

*CAPS = Curriculum and Assessment Policy Statement/s
*GPL(N)S = Gauteng Primary Literacy (and Numeracy) Strategy
*NCS = National Curriculum Statement(s).

Section 2: Literacy and language (Status, problems, solutions)

2.1 What do you think should a literate child be able to do?

2.2 What is the best way to teach literacy?

2.3 In which literacy and language teaching techniques have you been taught? (*Wait for a first response before exploring the next: What formal grammar, phonics, linguistics, whole-language, communicative or other "theoretical" elements of language didactics and pedagogy have you been trained in? Which do you use still, and how?*)

2.4 Do you think learners read and write better in Sepedi / isiZulu (or other home languages) than they do in English? (*Explore reasons and explanations for the answer.*)

2.5 Do you know of large-scale or international tests completed by our learners? If so, what do they tell us about our learners' language proficiency? (*Do you see this as a national education crisis? Later: Have you heard about ANA, PIRLS, PISA, SACMEQ*?)

2.6 What can teachers do to improve literacy and language teaching in South Africa? (*If it was seen as in crisis, what would be their strategy to address that?*)

Section 3: Resources in your school and in support of your teaching (classroom practice)

3.1 Do you have a library? (*Is it for the whole school, or a classroom library? If there isn't any, what would you at least want to have? How would you use it for the learners?*)

3.2 Would you like the support of the community (literate parents, youth, university students, etc) to interact with children as readers or listeners in the class or after school?

3.3 Are there story books available in the mother tongues of learners? (*Explore numbers and quality*.)

3.4 How do open-ended questions such as 'What did you like about this story?' work with children?

3.5 Are students who are good in their mother tongue also good in English? (*Why would you think some students are better in a language or languages than others?*)

3.6 Do you feel learners in the primary school understand their teacher's instructions better in their mother-tongue compared to instruction in English?

3.7 In an English language class when do you use the mother tongue and why?

3.8 Does CAPS allow you to use the mother tongue in an English language class? (*How do you feel about CAPS in relation to teaching in an English language class?*)

3.9 What does CAPS allow you to teach, and what not?

3.10 Do you teach only from the textbook, or do you also use other resources including examples from everyday life?

3.11 Do you ever use group work in class? (*Why or why not? Do students in groups discuss work with each other, or only interact with the teacher?*)

3.12 Are students ever required to write on the black board?

3.13 Who is an ideal learner for you? (*Think about some actual role models from your current classes or classes in the last few years.*)

3.14 Do you use the pictures in the textbook? (*Is there any guidance in the textbook how to use pictures? If not, do you have any ideas how pictures can be used?*)

3.15 Is there any pressure on you to complete the syllabus / textbook? (*Is it important for you to complete the allocated portions?*)

3.16 What aspect of teaching do you most enjoy? (*Base it on memorable experiences.*)

3.17 Is discipline in the class a problem for you? (*How do you handle it? How would you like to handle it?*)

3.18 What is your ideal class size? (*What is your current class size? Do you have any ideas about how to handle large classes?*)

Section 4: Debriefing and feedback on video recordings

Show the observed teachers relevant selections from (or all of) the footage related to their own teaching again. Ask:

4.1 Do you consider this a good example of your regular teaching?

4.2 What was the objective of the lesson / the part viewed?

4.3 How well do you think you have achieved that?

4.4 What do you think the children learnt?

4.5 Have the children enjoyed the lesson? (Was most of them engaged / interested most of the time? In which activities specifically?)

4.6 What were the best parts / of the lesson?

4.7 What would you have done differently if you had the chance?

4.8 How closely was CAPS/GPLS followed?

4.9 Which resources have you had and would you have liked to have had?

4.10 Which constraints limit your language teaching most?

Communicate to the teacher the research team's provisional understanding of the impact of two or three key literacy development events during the lesson. Ask the teacher to say if he/she agrees with the team's interpretation, and why (not).

Section 5: Language in education policy

5.1 What is (are) your school's Language(s) of Learning and Teaching (LOLT) in actual practice? *(Does it differ from the school's official Medium of Instruction (MoI)?*)

5.2 Do you know if your school has an explicit Language in Education Policy (LiEP)? (*Have you seen it? Where? Are you able to show us a copy?*)

5.3 If it has, who developed it? (*Was it based on a standard Education Department template, minimally changed by the School Governing Body (SGB)?*)

5.4 To what extent is the policy being implemented? (*If not, why so?*)

5.5 Does the school's LiEP work / bring about what it was intended to?

5.6 Are there any adaptations / changes that need to be made? (*Considering present school language and related demographics factors.*)

5.7 When are children required to move from one language to a different LOLT? (*What is the effect of that? Do you consider it to be too soon, too late, or just right?*)

5.8 Are the learners able at the stage noted in 5.7 to make that switch? (*What are the consequences for mastering learning content across the curriculum? What would an ideal point for the switch be?*)

5.9 How well does your school's teacher profile fit your LiEP? (*And the area's demographics?*)

5.10 Which language/s is/are learners exposed to: (a) at home, and (b) in their broader environment?

5.11 What language practices do you accept in the classroom? (*Code switching, trans-languaging, etc.? What do you do for those learners whose home language does not match the language policy?*)

Section 6: Intervention teaching (Only applicable to Limpopo surveys)

6.1 What do you think was the objective of the lesson that you observed?

6.2 Did you find anything interesting in the intervention lesson?

6.3 Do you think the learners learnt something they did not know before?

6.4 Do you think you can also do some of the things you observed in the intervention lesson(s)?

6.5 What aspect(s) do you think might work in your classroom?

6.6 What are those things that you think may not work in your classroom?

6.7 What is your overall feeling/impression about the lesson you have just observed?

6.8 Do you think the classroom activities were different from what normally happens in lessons?

6.9 Do you think the learners behaved differently from how they normally do?

6.10 What were the positive things you noticed about the lesson?

6.11 What were the negative things you noticed about the lesson?

6.12 Do you think the CAPS objectives for this lesson were met?

6.13 Is there any aspect of the lesson that you would retain in your own teaching in future?

6.14 Is there any aspect of the lesson that you would not include in your own teaching in future?

6.15 Do you think such interventions are useful or not useful?

6.16 Do you think relations between schools and universities could be based on such teaching interventions and discussions? (*Why or why not?*)

Annexure 3: Schedule of questions used in teacher interviews in the NRF research project related to the teaching intervention

Section A: About the demonstration lesson

1. What is your overall feeling/impression about the lesson you have just observed?
2. Do you think the classroom activities were different from what normally happens in lessons?
3. Do you think the learners behaved differently from how they normally do?
4. What were the positive things you noticed about the lesson?
5. What were the negative things you noticed about the lesson?
6. Do you think the CAPS* objectives for this lesson were met?
7. Is there any aspect of the lesson that you would include in your own teaching?
8. Is there any aspect of the lesson that you would not include in your own teaching?
9. Do you think such interventions are useful or not useful?
10. Do you think relations between schools and universities could be based on such teaching interventions and discussions? Why or why not?

* CAPS = Curriculum and Assessment Policy Statements

Section B: About resources in your school and your own teaching

1. Do you have a school library?
   Do you have a class library?
   Would you wish to have one?
   If so, how would you use it for the students?
   Would you like the support of the community (literate parents, youth, university students, etc.) to interact with children as readers or listeners in the class?
2. Are there story books available in the mother tongue?
3. How do open-ended questions such as "Did you like this story?" work with children?
4. Are students who are good in their mother tongue also good in English? Can you offer any reasons why you think some students are better in a language or languages than others?
5. Do you feel students in the primary school understand their teacher's instructions better in their mother-tongue compared to instruction in English?
6. In an English language class when do you use the mother tongue and why?
7. Does CAPS allow you to use the mother tongue in an English language class? How do you feel about the CAPS as related to teaching in an English language class?
8. What does CAPS allow you to teach, and what not?
9. Do you teach only from the textbook, or do you also use other resources including examples from everyday life?
10. Do you ever use group work in class? Why or why not? Do students in groups discuss with each other, or only interact with the teacher?
11. Are students ever required to write on the black board?
12. Who is an ideal student for you (think about some actual role models from your current classes or classes in the last few years)?
13. Do you use the pictures in the text book? Is there any guidance in the textbook how to use pictures? If not, do you have any ideas how pictures can be used?
14. Is there any pressure on you to complete the syllabus/text book? Is it important for you to complete the portions?
15. What aspect of teaching do you most enjoy? (based on memorable experiences)

16. Is discipline in the class a problem for you? How do you handle it? How would you like to handle it?
17. What is your ideal class size? What is your current class size? Do you have any ideas how to handle large classes?

Annexure 4: Classroom observation – Verbatim transcription within clusters of activity from video footage: Gr 3 EFAL (GP; 14 Nov 2011)

Actor / speaker	Activity / action	Spoken contents - full transcription	Time
Teacher; with whole class	Learners, on instruction of the teacher, stand up at their desks and sing an English song they know, while making the following movements: (1) Most rotate one arm forward around their shoulders in a wide arc, while some, but later only one or two, roll both arms forward around each other and with elbows bent in front of their chests. (2) Learners, with elbows bent, sweep both hands, with only the index fingers extended, from left to right in front of their faces, on the beat as before. (3) Hitting the bottom hand on the thumb and index finger, rolled up in a loose fist, with the other open hand from the top, on the triple beats only (some learners merely clap) (4) Learners flex and unflex their fingers while shaking their arms and hands in front of their stomachs, on the triple beats only. (5) Learners mimic holding a steering wheel on singing "driver of the bus"; point a finger on "go", and bend their lower body into a sitting posture on "sit down" (with many out of sync or unable to pick the right move this time) (6) Learners open and close their fingers, palms to the front, in front, but slightly wide, of their faces on the triple beats only. (7) Some learners mimic cradling a baby, other point a finger, and others do as they like, on the triple beats only. The teacher only occasionally prompted the learners by suggesting the next verse's wording, or encouraged them to participate more actively.	Learners in chorus: (1) "The wheels of the bus go round and round (3x)", (# "all day long") (2) "The wipers on the bus go back and forth (3x)", #; (3) "The horns of the bus go peep-peep-peep (3x)", #; (4) "The money on the bus goes ching-ching-ching (3x)", #; (5) "The driver of the bus say(**s**): Go sit down! (3x)", #; (6) "The baby on the bus say(**s**): wha-wha-wha (3x)", #; (7) "The mummy on the bus say(**s**): shoo-shoo-shoo (3x)", #. # The seven lines are repeated each time without the triple (3x) part, which then only occurs once followed by all day long (x2). Notes: A few learners may have sung "horn ... goes" at (3). Learners (a majority even?), use incorrect grammar in three cases; see "(**s**)".	00:00 – 01:53
Teacher; with whole class and individual learner responses	The teacher requests the learners to sit and open their flip-files. (# Pacing up and down some rows to ensure it is done.) They are told that they're going to recap pages 2-5 first as	Teacher: "Thank you, sit down, and please just wait" (Unclear brief conversation, which may be an arrangement with the researchers – see 2nd camera angle too still) "Now let's take out our ... take out your flip-files. Let's open ... put your flip-	01:54 – 05:00

	revision of previous work. They are asked what the title of the book is, and what it is about. @ Learner is left standing, looks somewhat embarrassed, and later sits down by herself. Concord – "talks" * Pronounced as "Lottrey", seemingly in a deliberate attempt to get as close as possible to "native English" pronunciation – also see later at **.	files in front of you. (#) We are going to use the different pages. Just keep quiet and take out your ... Take out your flip-files. Now, before you can open that flip-file, let's hear: What is the title of our book?" Learners (about 5-8 freely responding): "Mr Joseph". Teacher (cutting them short): "Raise up your hands". Boy? learner (as pointed out by teacher): "The title of our book is Mr Joseph" (almost inaudible) Teacher: "The title of our book talks about Mr Joseph. Only?" Learners (2-4): "No". Teacher: "What does it say? ... M" Boy/learner: "Mr Joseph, the millionaire". Teacher: It talks about Mr Joseph, the millionaire. Learners (in chorus): Mr Joseph, the millionaire (increasingly more of them) Teacher: "Throughout our story, we are just going to use p.2, p.3, p.4, p.5. I just want to find out from you ... from p.2 to p.5, let's just recap what we ... we ... we ... we read about. I just want to find out if you still remember what the story was all about. Can one of you stand up and tell me what is the story all about? Stand up A" Girl learner (on raising hand and being called upon): "Lotto." @ Teacher: "I want you to tell me the story ... a little bit of the story. What is the story all about? (@) I want to know the story. What does it talks about? The story. Let's hear. S". Girl learner (standing up): "The story talks about Mr Joseph playing the Lotto, and ... and his wife, and the shopkeeper." Teacher: "The story talks about Mr Joseph, the game - the Lotto - and the wife and the shopkeeper. Clap hands for S." (Three crisp claps by class.) "Now, ... when we read the story, they say Mr Joseph was a man who used to play ... What?" Some learners: "Lotto." Teacher (pointing): "T".??." Girl learner: "Lottery." Teacher: "He used to play Lottery."* What is Lotto ... Lottery? What is the Lottery? Let's hear. Th? (shying away). What is the Lottery? Girl learner (confidently): "The Lotto is something that you play with ... with money." Teacher: "Good! Clap hands for (pointing). [Learners clap crisply.] The Lottery ... it's something that you play ... that you use your money. It's a ... game.	

Teacher; with whole class and individual learner responses	The teacher engages the class about different games that exist.	Teacher: “Do you know different types of games? Learners (in soft chorus): “Yes.” Teacher: “Do you know different types of games? Learners (in soft chorus, slightly louder): “Yes.” Teacher: “Except the game of Lotto, what games do you know? Learners: ... Soccer ... (and various other simultaneous inaudible suggestions) Teacher: “Raise up your hands”. Learner: “Powerball.” Teacher: “Powerball. Another game that you know? Any games.” Learner: “Cricket.” Teacher: “Cricket. Good!” Learner: “Hopscotch.” Teacher: “Hopscotch”. Learner: “Football” Teacher: “Football. Let’s hear.” Learner: “Soccer.” Teacher: “Soccer. It’s football as well.” Learner: “Netball.” Teacher: “Netball. Those are different types of games. Some of the games ... we just play them for ...friendly. But some of the games we play for ... money.”	05:01 – 05:49
Teacher; with whole class and individual learner responses	The teacher requests the class to open their books on pages 2 and 3 and to interpret the pictures. She notes again that this is still revision. He / She?	Teacher: “Now when we read this story of Mr Joseph, we hear that this man played Lotto so that he must ... he wants to ... win millions. Now, we see Mr Joseph ... Let’s open p.2 and p.3. Look at the picture on p.2 and p.3. When we see p.3, what is happening on this picture? Let’s hear.” Learner: “Mr Joseph ... his wife used to write his numbers for him.” Teacher: “Mr Joseph’s wife -- when you ... you answer, you must speak out load, nê – Mr Joseph’s wife is writing numbers for ... Mr Joseph. He’s writing a Lotto ticket. Why didn’t Mr Joseph write his own lett... uh ... Lotto ticket? Let’s hear.” Learner: “He could not write or read.” Teacher: “ Mr Joseph couldn’t write or read. Now ... that is why ... that is the reason why you come to school ... so that you must know how to do what? How to ...?”	05:50 – 07:30

		Learners: “Read”. Teacher: And how to ...? Learners: “Write.” Teacher: “Yes! That is why you come to school so that you must be a better person. You can go outside. You can ... uh ... write your own names. You can fill out these forms. It is important to come to school. So, Mr Joseph didn’t go to school. So he rely (relied?) on the wife to write what? To write the numbers for Lotto for him. He must write the numbers. So Mr Joseph takes that ticket to the where? Where is Mr Joseph playing the Lotto?” Learner: “In the shop.” Teacher: “He ... he ... he plays Lotto in a shop. Who’s the owner? Who do we talk ... we ... we call ... the person who owns the shop. We call him ... what?” Learners: “Shopkeeper.” Teacher: “We call him the ... shopkeeper.” Learners (in chorus joining in simultaneously): “Shopkeeper”.	
Teacher; with whole class and individual learner responses	The teacher announces that revision of reading is going to follow. Learners read in chorus. Note aa: Some instructions were given in Sepedi early in this sub-section (at 08:07 minutes in the recording) to a learner to collect his flip-file from another class. (The observed class was a recombination from all the teacher’s classes to get together only those who brought back the parent consent forms.)	Teacher: “Now let’s just do revision of the reading. Go to p.2 ... p.2 in your ... flip-files. <u>P.2</u> ... in your flip-files. P.2 in your flip-files (impatient). {Sepedi two sentences. See Note aa. Go and ask for the flip-files. I said to you bring your flip-files as well. Go and ask for the flip-file in my class. Make it quick ... D. They forgot their flip-files. Now ... let’s look on p.2 and read the story. P.2 ... start reading.” Learners (whole class): Mister (“Miester”**) Joseph was a man with** high hopes. He never missed buying a Lotto (some read “Lottery”) ticket**. Sometimes he would (“will” read by many?) take the money to buy bread for his family and play the Lotto with** it. Teacher: “Let’s go to p.3.” Learners (whole class): He could not read or write. His wife used to write his numbers for him. Many years passed and he never won anything. He always kept all his tickets** in his shack. There were papers everywhere in the shack.” Teacher: “Go to p.4.” Learners: “His ... “ (starting to read the first word on the next page) Teacher: “Wait. Wait. Let’s wait for everybody to open up p.4. Everybody ... are you on p.4?” Learners: “Yes”. Teacher: “Everybody ... are you on p.4?”	07:31 – 10:12

		Learners: “Yes”. Teacher: “Now let’s read p.4”. Learners (whole class): “His wife used to say: ‘My children go to bed hungry every day because of your Lotto. I’m sick of it’. Mr Joseph used to say: ‘One day you’ll be a wife to a millionaire.’ One Saturday his wife went away to visit** relatives. Mr Joseph went to the shop to play the Lotto. He said to the shopkeeper: ‘One day I will win the Lotto and buy you and your shop.’ Teacher: ”Now let’s put away our books.”	
Teacher; with whole class and individual learner responses	The teacher now focuses them on the chalkboard. She also reminds them that she has given them new pages (6 and 7), where she expected them to look at the pictures, and derive “vocabulary” from them. (With flash cards being pasted to the chalk board all along.)	Teacher (continuing) “Let’s look on the chalkboard. ... I’m giving you p.6. It’s a new page. And p.7 ... p.6 and p.7. Is everybody having p.6 and p.7?” Learners: “Yes.” Teacher: “The new one?” Learners: “Yes.” Teacher: “The new page. Now let’s look on p.6 and p.7. Look at the pictures on p.6 ... and ... p.7. Look at the pictures. (To one learner ...) Where is your ... your ... your copy? (To whole class again ...) Page 6 and p.7. Let’s look on those pag... those pictures. Let’s try to talk about the picture on p.6. Let’s try to talk about the picture on 6. Look on p.6. Tell me what is happening on the picture on p.6. Th?” Learner (soft – check): “Mr Joseph is dancing ...“ Teacher: “Look at the picture and tell me what is happening.” Learner: “Mr Joseph is dancing on ... to the radio.” Teacher: “Good! When we look on p.6 ... we are going to take out our vocabulary. Now, on p.6, we see Mr Joseph. Mr Joseph is ... dancing. When you look at Mr Joseph dancing, ... he’s dancing to what?” Learner: “Music.” Teacher: “He’s dancing. When you dance, there’s something that makes you to dance. What is it?” Learner: “It’s the radio”. Teacher: “You play the radio. What do you play?” Learners: “Radio”. Teacher: “You play the radio. Let’s read the word ... radio.” (almost pronounced ‘redio’) Learners (whole class): “Radio.” Teacher: “Radio.” Learners (whole class): “Radio.”	10:13 – 14:55

		Teacher: “Now look at ... there on the picture and tell me what you see on this picture and .... let’s hear, B.” Learner: “We see Mr Joseph and his friend.” Teacher: “Mr Joseph and his friend. We see Mr Joseph and his friend ... and his friend”. When you look at Mr Joseph and the friend, what are they doing?” Learner: “They are talking about something(?) ...” Teacher: “They are talking. They are talking about something. Now, Mr Joseph is announcing something to his friend. To ‘announce’ is when you tell somebo... some... somebody something. So, when we look at Mr Joseph, according to the story from the p.2 to this page, we hear that ... we see that Mr Joseph might talk to his friend about the ... Lotto. Now, he announce... that is the announcement. What is it? Learners: “Announcement”. Teacher: ”When you announce ... Announcement is like when I come to the class and I say to you: ‘Uh ... tomorrow, you must tell your mother to come to school for a meeting at six o’clock. That is an announcement. I’m giving you an announcement. But, you are taking the announcement back home. But when you are at home ... What do we call it when you tell your mother what I said. We call it a what?” Learner: “Homework.” Teacher: “No, it’s not homework. Learner: “Message.” Teacher: “It’s a message! Clap hands for T. (Class claps crisply.) You are taking the message back to your parents. Now I’m going ... us ... just going to say: ‘Uh ... tell your mother to come to school tomorrow. There will be a meeting at six o’clock. Then, I’m making an announcement to you. But the minute when you take the announcement back to your parents, it’s a message. [Brief Sepedi interaction of two sentences with boy coming in late (about flip-file).] That is an announcement. Now, the announcement that Mr Joseph was doing ... Mr Joseph was telling his friend something. Mr Joseph was telling his friend what? He was telling his friend ... what?” Learner: “He was telling his friend he’s win the Lotto.” Teacher: “He has win the Lotto. Now, the word here is ... ‘winning’**. What is it?” Learners (whole class): “Winning.” Teacher: “What is it?” Learners (whole class): “Winning.”	

		Teacher: “Winning. Now look at the picture. Tell me what you see on this picture. Let’s hear.” Learner: ” “I see his wife with Mr Joseph.”	
Teacher; with whole class and individual learner responses	The teacher first explores the meaning of “street” further, by asking them in which street they live.	Teacher: “You see Mr Joseph and his wife. Yes, there we see Mr Joseph and the wife, and the friend. But when we look at Mr Joseph and the wife, ... where are they? Are they in their house, or are they ... where are they ... these people?” Learner: “In their house.” Teacher: “Thabiso, look at the picture on p.7 and say to me ... where are they?” Learner: “In the street?” Teacher: “They are on the street. Where are they?” Learners (whole class): “They are on the street.” Teacher: “They are on the street. Now, when we talk about the street, every one of you comes from a different street. Each and every one of you has the name of the street. Let’s hear, P, what’s the name of your street?” Learner: “?” Teacher: “You don’t have a street name? What is the name of your street?” Learner: ”M Street” Teacher: “M Street? I don’t hear you. Let’s hear.” Learner: “Benjamin.” Teacher: “B Street. Let’s hear. I don’t hear you.” Learner: “L Street”. (very soft) Teacher: “What?” Learner: “L.” Teacher: “L Street. He comes from ... She comes from L Street.” Learner: “T”. Teacher: “T Street.” Learner: “Th Street. Teacher: “I don’t hear you.” Learner: “Th Street. Teacher: “Th Street.” Learner: “T Street. Teacher: “T Street. Those are the different names of streets.”	14:56 – 15:44
		(continued)	15:44 – 18:28

Teacher; with whole class and individual learner responses	The teacher then focuses their attention on the concept of "corner". She asks them about the name of the other street intersecting with Tshukudu street at the taxi rank and where the shop is on the corner. Also people sitting drinking at the shebeen, pray, church, are explored. T: "Victory" (learners pronounce it with "o" as in "all", and teacher points out that it is how "people are calling it" but it should be closer to "victree". (One prior wrong learner response is ignored quietly.)	Teacher: "When we look at them – these people – they are standing somewhere on the corner of the street. Each and every street has got its own corner. When you go out from T Street, the corner is next to which stop? ... What is the store next to ... from ... from when you come out of the gate, going down towards the taxi ... the taxi rank? What do you see? What is the name of the shop that you see there on the street of T? Let's hear. Learner: "Tsh..." Teacher: "What street? What is the name of the shop there? There is a shop there at the corner. What is the name of your shop? ... Hey ... but they don't know where they are staying." Learner: "Victory." (pronounced as 'Victôry') Teacher: "Victory" (pronounced as 'Victôry') ... It's Victory (pronounced as 'Victree') Street, but people are calling it 'Victôry'. Next to T Street we see Victory. But when you go down there, you see people sitting somewhere drinking. Where do we ... where people drink(s?), we call it a what? Learner: "Shebeen." Teacher: "A shebeen. Learner: "A shebeen". Teacher: "We call it a what?" Learner: "Shebeen". Teacher: "Now, again. If I want to pray ... if I want to pray, I go where? Learners: "Church." Teacher: "Where do we go?" Learners: "Church." Teacher: "Where do I go to pray? I want to hear you ... at the back." Learner: "Church". Teacher: "We go to the ... church**. We go to the ... church. We go to the ... church. We go to the ... church." Learners: "... church." (for second to fourth repeats) Teacher: "When we go to the ch... When we come to school in the ... When you came to school today, we were standing there ... at the assembly. We call it what? Is it ... morning? Is it afternoon? Is it evening? N." Learner: "Morning". Teacher: "It was in the ..." Learners and teacher: "... morning." Teacher: "It was in the ..." Learners and teacher: "... morning." Teacher: "It was in the ... morning.	

		Learners: "... morning." (with the teacher) Teacher: "When we were sitting there ... When we were standing there, it was our assembly. We were praising God. But learners, when they go to assembly, what must they do? Learners: "Listen."** Teacher: "They must just listen ... " Learners: "... listen." Teacher: "... to the instructions from the teacher. He must understand ... he must listen to what the teacher is saying and do the work what the teacher says. Now, when we ... go on our assembly, ... when we hold our assembly, you listen. But the teacher will be doing what? Learners: "Talking." Teacher: "Talking, and then he's telling you what to do. He tells you what to do. Telling. What is the word?" Learners (whole class): "Telling." Teacher: "What is the word?" Learners (whole class): "Telling." Teacher: "What is the word?" Learners (whole class): "Telling." Teacher: "Then, everything that we were doing at the assembly, it was done when? Learners (whole class): "Today." Teacher: "Today. It was done ...?" Learners (whole class): "Today." Teacher: "It was done ...?" Learners (whole class): "Today."	
Teacher; with whole class and individual learner responses	The teacher directs them back to the chalk board to read the new vocabulary. This, the previous and next parts formed a very interactive dynamic filled with opportunities for learners to link the lesson to their own lives, reality and environment. Borrow / lend.	Teacher: "Now let's go back and read our words on the chalkboard. I don't have a ruler. S, can you borrow me a ruler? Borrow me a ruler. Thanks. Now, let's look on our chalkboard and read our vocabulary. Radio." Learners (whole class): "Radio". Teacher: "Announcement". Learners (whole class): "Announcement". Teacher: "Winning". Learners (whole class): "Winning". Teacher: "Street". Learners (whole class): "Street".	18:29 – 19:02

		Teacher: “Corner”. Learners (whole class): “Corner”. Teacher: “Shebeen”. Learners (whole class): “Shebeen”. Teacher: “Church”. Learners (whole class): “Church”. Teacher: “Morning”. Learners (whole class): “Morning”. Teacher: “Listen”. Learners (whole class): “Listen”. Teacher: “Telling”. Learners (whole class): “Telling”. Teacher: “Today”. Learners (whole class): “Today”. Teacher: “Who can tell me, what is a radio? What do we do with a radio? Let’s hear”. Learner: “We ... we ... we ... we ... we listen to the radio, and we listen to the soccer on the radio”. Teacher: “We listen to news, soccer, music, everything on the radio. Radio”. Learners: “Radio”. Teacher: “Announcement” What is an announcement? What is an announcement? When I’m standing here and giving you an announcement ... What is an announcement?“. Learner/s: “Message”. Teacher: “It’s taking the message back to our ... nuh ... the next person. If I send you, ... I give you an announcement, you take it to the next person to deliver the message.” Winning. Learners (whole class): “Winning”. Teacher: “Winning”. Learner: “Winning”. Teacher: “When I say winning, what is happening there?”. Learner: “I’m winning the Lotto.” Teacher: “You can play the Lotto and you win the Lotto. Can we only play the Lotto ... and win?” Learners: “No.” Teacher: “What can you play?.” Learner: “Powerball.” Teacher: “You can play Powerball and win.”	

		Learner: “Jackpot.” Teacher: “We can choose Jackpot and win. Let’s hear this side. People are sleeping here!” Learner: “Soccer(?).” Teacher: “We can play soccer with our friends and win the ... the ... the game. Sara. We can play cricket with our friends and win the game. Now ... street.” Learners (whole class): “Street.” Teacher: “Street.” Learners (whole class: “Street.” Teacher: “What is a street? None of us know what is a street! I just want you to tell me what is the street. Street. When you talk about the street, you talk about what? Let’s hear.” Learner: “Corner.” Teacher: “Not corner ... somebody can tell. Yeah?” Learner: “Road.” Teacher: “A re, it’s a road. Yes. It’s a road. Each and every road it’s got their street. And each and every street it’s got a what? It’s got a ...? Name.” Learners: “Name.” (together with the teacher) Teacher: “Corner.” Learners: “Corner.” Teacher: “Where do we get corners? When we talk about the corner ...” Learner: “Street.” Teacher: “On the street. And then in the class ... do we have corners in the class?” Learners (whole class): “Yes.” Teacher: “Where are the corners? Can one of you show me where is a corner? Thanks, T. Clap hands for T there.” (Clapping) “Shebeens.” Learners: “Shebeens.” Teacher: “Shebeens.” Learner: “Shebeens.”	
Teacher; with whole class and individual learner responses	The teacher focuses further on the newly gained vocabulary by expecting learners to make definition-like sentences with the words.	Teacher: “When they talk about shebeens, what do they talk about? What is happening in the shebeen? Let’s hear.” Learner: “They drink alcoholic.” Teacher: “Alcoholic. They drink ... alcohol. They drink what?” Learners (whole class): “Alcohol.”	19:03 – 26:39

	Other sentences (and teacher taking excursion opportunities): - Morning is when I wash my body, brush my teeth, dress myself, eat (probing for "breakfast, got "cornflakes" and "Kelloggs" as responses too), other meals being lunch as at the feeding scheme and supper / dinner - Probing the sense one listens with, and progressing from the ears to the other senses. Woke (tense), wash (concord)	Teacher: "When our parents go and buy beers or they buy wines, ... they drink there. Then the person who drinks everyday, we call him an alcoholic. You hear, he said, they drink 'alcoholic'. No, an alcoholic is somebody who drinks beer every day. He no longer eats. He just drink. He-he (chuckles). Now, a church ... (more quiet laughing). What is a church? Let's hear. At the back." Learner: "(inaudible – offering?)." Teacher: "Uh-u. Let's ... let's ... let's look for other people. S. I'm have you .. (inaudible). M." Learner: "A church is something you can go to and pray to the God." Teacher: "Good! A church is somewhere we go and pray to God, and that's what M is saying. Clap hands for M'. (clapping). Morning." Learners (whole class): "Morning." Teacher: "Morning." Learners (whole class): "Morning." Teacher: "Who can tell me? Who can tell me what is morning? L. A person can come here and say 'morning'. What is he saying?" Learner: "Today." Teacher: "Not today, ... morning." Learner: "Your mother he is said 'It is morning – go to school'." Teacher: "Like, when you wake up you ... you woke up, it's when?" Learners: "Morning." Teacher: "It's in the morning. What do you do when you woke up? What do you do? The first thing that you do when you woke up. T. Let's hear. Do what?" Learner: "I wash my body." Teacher: "I wash ... He says he wash his body. And then, what else do you do before you come to school in ...?" Learner: "Brush your teeth." Teacher: "Brush your teeth. Then from there, T?" Learner: "I wear my clothes." Teacher: "He wears his/her clothes. And what else?" Learner: "I eat." Teacher: "Yeah?" Learner: "I eat." Teacher: "You eat what? What do you eat?" Learner/s: Cornflakes ... Kelloggs ... Liquifruit." Teacher: "When we eat in the morning, the food that we eat in the morning	

		... we call it what?" Learner/s: "Kellogg's." / (Inaudible / simultaneous) / "Breakfast." Teacher: "A wa! Kelloggs!" Learners: "Breakfast." Teacher: "We call it ... breakfast. What do we call it?" Learners (whole class): "Breakfast." Teacher: "Then, through the break, we go to the feeding scheme. When we eat there, it's our what?" Learner: "Lunch." Learners (whole class): "Lunch." Teacher: "It's our lunch. It's our ...?" Learners (whole class): "Lunch." Teacher: "Now. At night, my mother cooks and we eat. What do we call the food?" Learner: "Supper." Teacher: "Supper or ...?" Learner: "Dinner." Teacher: "Good! Or dinner. Thanks." Now ... listen. Listen. Read." Learners (whole class): "Listen." Teacher: "Listen." Learners (whole class): "Listen." Teacher: "Can you explain listen ... to us? Can we explain listen? Let's hear, Thabo." Learner: "I'm listening to ma'am." Teacher: "A re. I'm listening to ma'am, or the teacher. What do you use when you listen? Do we use our legs to listen?" Learners: "No." Teacher: "What do we use when we listen? Learners (whole class): "Ears." Teacher: "We use our ears. Everybody touch your ears. (Learners do so) I listen with my ears. Say it." Learners (whole class): "I listen with my ears." Teacher: "What do you use to see?" Learners (whole class): "Eyes." Teacher: "Everybody, touch your eyes. Someone will touch her nose and say it's an eye ... the eyes. When we smell, what do we use?" Learners (whole class): "A nose." Teacher: "We use our nose. Everybody touch your nose. Ah ... A re. See me ...	

		ah (laughter). Everybody touch your mouth. What do you do with your mouth?" Learner/s: "Talk. I sing." Teacher: "You talk, and what else?" Learner/s: "I sing. Eat." Teacher: "Sing and eat. Everybody sing ... sing something for us." Learners (having fun, laughter): "La-la-la-la-la. (Clapping.)" Teacher: "Everybody must sing. Sing." Learners: "Singing." Teacher: "Jeso, Jeso, gehenna .... Jeso, gehenna mamasondo .... (learners join in) Everybody is singing. Thanks. Who can do this word for us? (pointing to 'telling')" Learners (whole class): "Telling." Teacher: "When they say telling, what is happening there? I don't understand those words. Just give me an explan... an explanation of telling." Learner: "Sometimes I'm telling you something." Teacher: "Good! You can tell me something. We tell something like what?" Learner: "Messages." Teacher: "Messages. We do jokes. We laugh. Everything. Now ... today. Today." Learners (whole class): "Today." Teacher: "Today." Learners (whole class): "Today." Teacher: "Today." Learners (whole class): "Today." Teacher: "I don't know ... when you talk about today. Can you make a sentence using the word 'today'? Make your word ... a sentence using the word today. Let's hear." Learner: "Today I go ... I go to school." Teacher: "Clap hands. Clap hands for P." (clapping) He said: 'Today I go to school.' Say it, everybody. Learners (whole class): "Today I go to school." Teacher: "When they say: 'Today I go to school', today ... If you want to show me 'today' with your action, what are you going to do? Learners: "Today" (pointing down) Teacher: "Let me see this ... the ... the action." Learners: "Today" (pointing down) Teacher: "What's the sentence? The whole sentence?"	

		Learners: “Today I’m going to school.” Teacher: “Today I go to school.” Learners (whole class): “Today I go to school.” Teacher: “Thank you!”	
Teacher only	The teacher instructs learners to open their books on page 6 and follow and point with their fingers as she reads. [A] Then Page 7. [B] Then repeating both pages another two times. [A and B]	Teacher: “Let’s open our book on p.6. I’m going to read with you. I’m going to read p.6 for you. You listen. You look inside your book. You point when I’m ... where I’m ... I’m reading. You don’t read. It’s ... You don’t say anything. You read, but I don’t hear your voice. You must read in silence. Now. [A] The next morning, the winning numbers were announced on the radio. He asked his friend to check the numbers for him. The numbers were the same. He went to the street telling everyone about it. Page 7. [B] He said: “From today, call me Mister Joseph – the millionaire”. He went to shebeens, to church and every street corner. He told everyone who could listen. I’m just going to read it again – you listen.” [A] The next morning, the winning numbers were announced on the radio. He asked his friend to check the numbers for him. The numbers were the same. {Sit with S. Sit ???} He went to the street telling everyone about it. Look inside your book where I’m reading. [B] He said: “From today, call me Mister Joseph – the millionaire”. He went to the shebeen, to church and every street corner. He told everyone who could listen.	26:40 – 28:10
Teacher only	Points out and has learners correct the error indicated above in italics (“me”, not “be”).	When we look on p.7, they say he said: ‘From today, by call ‘be’ – have you seen it?” Learners (whole class): “Yes.” It’s not ‘call be’. Just put a cross on the ‘buh’, and put a ‘mmm’. It’s ‘call me’. Change it there. Change it on your paper. Where they have written: he went there. ‘From today, call be Mr Joseph’ ... it’s ‘call me Mr Joseph’. Just correct the ‘b’ and write it there – ‘mmm’ ... the ‘m’. Thanks. Let’s continue. Now, ...”	28:11 – 28:45
Teacher; with whole class	Teacher expects learners to read sentence by sentence after her for passage [A]. And then with her.	(continued) Teacher: “... I’m going to read. Each and every sentence that I read, you read after me. Everybody look inside your papers. Everybody look inside your papers. Sara, (Sepedi piece? – “a re mm help), look inside your paper. Let’s	28:46 – 31:40 (up to 31:19)

	Then alone.	read. [A] The next morning, the winning numbers were announced on the radio. Read." Learners (whole class): "The next morning, the winning numbers were announced on the radio." Teacher: "He asked his friend to check the numbers for him." Learners (whole class): "He asked his friend to check the numbers for him." Teacher: "The numbers were the same." Learners (whole class): "The numbers were the same." Teacher: "He went to the street telling everyone about it." Learners (whole class): "He went to the street telling everyone about it." Teacher: "Let's read again togeth...uh ... I'm going to read; you read after me. [A] The next morning, the winning numbers were announced on the radio. Learners (whole class): "The next morning, the winning numbers were announced on the radio." Teacher: "Share the page. He asked his friend to check the numbers for him." Learners (whole class): "He asked his friend to check the numbers for him." Teacher: "The numbers were the same." Learners (whole class): "The numbers were the same." Teacher: "He went to the street telling everyone about it." Learners (whole class): "He went to the street telling everyone about it." Teacher: "Let's read together. The next morning the winning numbers were the ... Let's read together." Teacher and whole class together: [A] "The next morning, the winning numbers were announced on the radio. He asked his friend to check the numbers for him. The numbers were the same. He went to the street telling everyone about it." Teacher: "Again let's read together on p.6." Teacher and whole class together: [A] "The next morning, the winning numbers were announced on the radio. He asked his friend to check the numbers for him. The numbers were the same. He went to the street telling everyone about it." Teacher: "Read alone; p.6." Learners (whole class): [A] "The next morning, the winning numbers were announced on the radio. He asked his friend to check the numbers for him. The numbers were the	(up to 31:40)

		same. He went to the street telling everyone about it." Teacher: "Clap hands for yourself. You can read p.6 now. (Clapping)	
Teacher; with whole class	Then the teacher repeats the same routine with passage [B] – after her. With her. Alone	(continued) Teacher: "Now let's go to p.7, and read it. Listen. [B] He said: 'From today, call me Mister Joseph – the millionaire'. He went to the shebeen, to the church and every street corner. He told everyone who could listen. Now let's read. I'm going to read, you read after me. [B] He said: 'From today, call me Mister Joseph – the millionaire'. Learners (whole class): "He said: 'From today, call me Mister Joseph – the millionaire'". Teacher: "He went to the shebeen, to the ... to church and every street corner." Learners (whole class): "He went to the shebeens, to (some say "the" here too) church and every street corner." Teacher: "He told everyone who could listen." Learners (whole class): "He told everyone who could listen." Teacher: "Again. [B] He said: 'From today, call me Mister Joseph – the millionaire'. Learners (whole class): "He said: 'From today, call me Mister Joseph – the millionaire'". Teacher: "He went to shebeens, to church and every street corner." Learners (whole class): "He went to the shebeens, to church and every street corner." Teacher: "He told everyone who could listen." Learners (whole class): "He told everyone who could listen." Teacher: "Read alone; p.7." Learners (whole class): "He said: 'From today, call me Mister Joseph – the millionaire'. He went to the shebeens, to (some say "the" here too) church and every street corner. He told everyone who could listen." Teacher: "I've heard people saying: 'He went to the shebeen.' It's not: 'He went to the shebeen'. You must read what you see there. 'He went to shebeens, to church, and every street corner'. That is what you have to read. Let's read it again. 'He said ...'" Learners (whole class): [B] "He said: 'From today, call me Mister Joseph – the	31:41 – 35:04 (up to 33:10) (up to 35:04)

		millionaire'. He went to the shebeens, to church and every street corner. He told everyone who could listen." Teacher: "Let's read p.6 and 7 again, alone. Learners (whole class): [A] "The next morning, the winning numbers were announced on the radio. He asked his friend to check the numbers for him. The numbers were the same. He went to the street telling everyone about it. [B] He said: "From today, call me Mister Joseph – the millionaire". He went to the shebeens ..." Teacher: "It's not ... Hold! It's not: 'He went to the shebeens'. It says: 'He went to shebeens' Learners (whole class): "He went to (some say "the" here too) shebeens, to church and every street corner. He told everyone who could listen."	
Teacher and 5 selected learners	The teacher identifies three learners who struggle ("who don't know how to read"), and organises them, with two good readers, to bring their chairs and flip-files and sit in a small circle at the front. They quietly, aided by the proficient readers, start reading passages [A] and [B] again.	Teacher: "I realise that there are some learners who don't know how to read. R, you, and you ... you were not reading during our lesson. You go and sit down there at the front with your ... with your ... with your flip-files. Go there – one, two, three – go there. Sit in a circle there. We are going to read with you. Go there. ... Take your chairs and go to the front. And sit down. And read. A, take your chairs ... Now, A, take your chair and read with them there. That is the end of my lesson. Go there and read with them ... read for them. They must read after you. S, join them as well. And learn to read. Now. Take out your class work books. You're going to do ... Read with them there. My lesson is over." (The next almost 15 minutes were filmed too, as it served as assessment of the work done during the lesson. – Noted in a second footage file when filmed from the front, and transcribed separately hereafter.)	35:04 – 35:34
Teacher; with whole class	Learners are asked to take out / collect from the front their class-work books. Teacher monitors/helps the 3 + 2 learners at the front. Five learners at front continue to read pp. 6 and 7 again, and then slot back into the assessment session.	Teacher: (Giving some instructions in Sepedi to organise the class.) "Now. All sit down. Take out your class-work book. We are going to do dictation. We are going to do dictation. Before we do dictation, I carefully kept (unclear) the words that we were giving. Radio." Learners (whole class): "Radio." Teacher: "Radio". Learners (whole class): "Radio."	00:00 – 02:05 02:05 – 02:36

	Everyone rejoins and reads the chalk-board cards again. These are then removed.	Teacher: "The next one – announcement." Learners (whole class): "Announcement. Winning. Street. Corner. Shebeens. Church." Teacher: "Everybody read." Learners (whole class): "Morning. Listen. Telling. Today." Teacher: "Now let's read for the last time." Learners (whole class): "Radio. Announcement. Winning. Street. Corner. Shebeens. Church. Morning. Listen. Telling. Today."	
Teacher; with whole class	Teacher shows learners on board to prepare for the "assessment" in their books (Day, date, caption, numbers from 1-10, draw line).	Teacher: "Right. I gave today's date. Today is ...?" Teacher and learners: "... Monday." Teacher: "Today is Monday. The next page. When you finished writing the date is ... Today's date is ...?" Learners: "14th of November." Teacher: "14th ..." Learner: "15th." Teacher: "15th?" Learners: "14th" Teacher: "T, let's confirm the date." Learner: "14th. 14th." Teacher: "14th. 14th." Learners: "November." Teacher: "November." Learners: November." Teacher: "2011." (long pause of +/-30 sec) Make it snappy ... make it snappy (to few learners going out to get their books). Learner/s: "The next page ... the next page." Teacher: "The what?" Learner/s: "The next page." Teacher: "The what?" Learners: "The next page." Teacher: "For what? ... The next page for what? You write on the ... at the end of the ... the ... the ... the last class work that we have done ... on Tuesday. (Some conversation in Sepedi.) Dictation. (Some conversation in Sepedi – some learners leave class to fetch their work books.) Right. ..... You write number 1 up to number 10. ..... You don't share the books. .....One up to 10 (wiping chalkboard and showing how). Seven, eight, nine,	02:37 – 09:33

		ten. Draw a line at the end ... of number 10. Draw a line – you skip one line – you draw a line at the end of number 10. Are they all back? Are they all back?" Learners: "Yes." Teacher: Yeah? ..... (long pause) Are they all back?" Learners: "Yes." ..... Teacher: "X, ... T, look at the chalkboard and write your date. Stop looking at the back. ..... N. One up to 10. ..... (Sepedi conversation, organising few learners.) You write 'dictation', and you write one up to 10, and you draw a line at the end. ..... Draw a line with the ruler. ..... You must draw your lines using a ruler. After your lessons one of tutor (unclear), you must draw your lines using a ruler. ..... You must underline your dates. You must underline 'dictation'. You write one up to 10. You draw a line ... at the end of number 10, so that when I call a word, you write your word. (To a specific learner →) Draw a line at the end of your ... the number 10. Draw a line, ... at the end of your number 10."	
Teacher; with whole class	Teacher gives the assessment. (1, 2 .... 10) Learners keep their work closely hidden. Teacher makes sure everyone is ready (2x). Books are passed to the front of the row – in organised and disciplined way. (announcing Item "2", some learners completed in chorus with "day" – Two-day) ☺	Teacher: "Is everybody ready for number 1? Learners: "Yes." Teacher: "Is everybody ready for number 1? Learners: "Yes." Teacher: "Who of you are not ready? Raise up your hands, those who are not ready. ... Who didn't finish writing their date? I'm go'int to ... I'm going to give you only three minutes to finish it. When I clap my hands, everybody must be prepared to write number 1. ... ... (helping individual learners) Draw a line ... at the end of number 10. I'm going to call number 1. When we finish writing number 10, everybody, you bring your book to the front. You don't stand up; you just bring your book to the front. I'll get your books at the front tables, nê. Now I'm starting number 1." Learners: "Yes." Everybody's ready? Number 1." Learners: "Yes." Teacher: "Today. (To a specific learner →) A, you must write inside the lines. Don't just write. ... Two." Learners: "Yes." (Some complete – "...day") Teacher: "Church ... church ... church ... Three." Learners: "Yes."	09:34 – 13:47 (12:32)

		Teacher: “Make it snappy ..... (Sepedi) Three. Listen ... listen ... listen .....listen. Three (Sepedi ... number three) Where are you? Number 3 ... listen ... listen. Number 4.” Learners: “Yes.” Teacher: “Number 4.” Learners: “Yes.” Teacher: “Street ... street ... . Number 5.” Learners: “Yes.” Teacher: “Corner ... corner. Six”. Learners: “Yes.” Teacher: “Read ... read ... read ...read. Seven.” Learners: “Yes.” Teacher: “Seven.” Learners: “Yes.” Teacher: “Radio ... radio ... . Eight.” Learners: “Yes.” Teacher: “Win ... win ... win. ..... Win. Eight. ... Nine.” Learners: “Yes.” Teacher: “ Tell ... tell. .....The last one.” Learners: “Yes.” Teacher: “Number 10.” Learners: “Yes.” Teacher: “Morning ... morning ... morning. ..... Everybody, pens down. Close your books. Pass your book to the front. Don’t throw it. Just pass your book to the front desk. Pass your books to the front desks. O. Pass your book to the front. All the books must come to the front.	

Annexure 5: Notes on context of video footage of EFAL Grade 3 classroom observation (14 Nov '11)

The school, which spans from Gr R to 7, has 1 800 learners with a teacher complement of 54. It is very large for a primary school and functions reasonably well. It seems to have a good "name" in the area that may lead parents to want their children to be enrolled there, although mere proximity and the visibility of existing infrastructure may explain high enrolment as well. It has built premises and facilities, and is located in the centre of a big feeder area. The school grounds were always clean during our visits, and the facilities are reasonably new and are well kept. Learner discipline results in an orderly atmosphere at assembly, in classes, and while rotating to and from classes and during breaks (albeit much noisier then). The children seem happy and enthusiastic. However teachers complain that Grade 7 learners in particular are ill-disciplined and cannot be controlled.

There are 22 teachers in the FP for the above learner numbers and classes, including two Heads of Department (HoDs, or Phase Heads), who are not responsible for a full class but teaches some lessons (i.e., four English classes in Gr 3 in one case; four English and some Life Skills classes for the other). The tasks of HoDs are the typical ones related to controlling learner work books, monitoring teachers (files and mark sheets), moderating tests and assignments, and curriculum management in the broad sense, and serving as intermediaries in relation to the Department.

There is also since 2011 a single Grade R class of 35 learners. Parents have to make a contribution to make good that part of the teacher's salary (paid by the School Governing Body - SGB) that is not covered by a DBE stipend. The anticipation is that there would be two Grade R classes (maximum should be 30) in 2012, should the container facility be delivered on time. The future plan is to have Grade R facilities for all learners that have to go to the seven Grade 1 classes, as per national policy.

All of the above positive characteristics occur despite the community being very poor. It is a Quintile 1 school, has a feeding scheme, and receives special support for needy children and parents through a school-linked family-support programme run by the Department of Social Development. The latter, for instance, is designed to identify and support children in need of food, blankets, clothes, basic school stationery, etc. The teachers estimate that every class of 48 to 50 on average has at least one or two such children, but that it could be as many as four or five.

The HL / LoLT situation and related characteristics can be summarised as follows:

Grade	Boys/girls	Minutes per day for EFAL	Sepedi: Nr classes (learners) [ave]	Zulu: Nr classes (learners) [ave]	Total number (learner) [[ave]]
1	153 / 143	10	5 (236) [45]	2 (72) [38]	7 (296) [[42]]
2	146 / 118	20	*4 (175) [44]	2 (89) [44]	6 (264) [[44]]
3	150 / 115	30	*4 (194) [48]	1 (71) [71]**	5 (265) [[53]]

* The reason for the drop-off being given as retention of slow learners, movement of parents who change school often on the basis of a low ratio of permanent marital relations among them.

** Every multiple of 45 qualifies for another teacher, hence this large class size.

Sepedi and isiZulu serve as the two official LoLTs during the FP and later as subjects (HL) as shown above. Both are among the dominant languages of the feeder community but isiXhosa and isiNdebele are also significant, while isiSwati and Xitsonga are more limited.[68] Due to the language choices of the school, teachers are all fluent in either Sepedi and/or isiZulu, with some speaking Setswana, but they all come from the same environment and are therefore also fluent in the dominant local, Sotho-based, vernacular.

[68] A nearby school offers Xitsonga, which may explain the low number of Xitsonga-speaking learners in this school.

If Sepedi-LoLT classes seem reasonably linguistically homogeneous, this is not the case for the isiZulu ones, where there may be in any given class just below or about half the number of learners who speak the LoLT at home. However, the Deputy-Principal explained that those taken along onto the isuZulu track right from Term 1 in Grade 1 usually adjust and do cope by the second term. If necessary, some code-switching is employed, or teachers would solicit the right words in the variety of vernaculars from competent speakers if so required to convey meaning to a child who does not understand something in class. Problems may arise for those learners who join the school at a later stage, and come from an area where the school they attended had another language (isiNdebele speakers from Mpumalanga or isiXhosa from Eastern Cape), but they are in the minority.

Parents insist that the school accepts such children (about one to five per class, it seems), even if the overlap is absent, but because of the good reputation of the school or its convenience for them. It has to be noted that reliable HL statistics are difficult to come by for the school as the languages of fathers and mothers differ, and because of the many non-permanent co-habiting relationships that occur, as well as the involvement of a range of other levels of care giving. Unfortunately, the EMIS-required information of learners HL has been passed on to the DBE and is not kept at the school any longer.

Then there is the issue of the standard forms of languages. In both cases (Sepedi and IsiZulu), there is a big distinction between the rural varieties (Limpopo Sepedi and KZN isiZulu) and the urban ones (Mamelodi Sepedi, urban/Gauteng isiZulu) with a "street-version" also coming into the picture in townships and cities because of the large array of languages that children hear. (They speak of Pretoria-Sotho in general).

In 2011, teachers were trained and equipped to follow the GLPS, which provided course material in the two relevant languages and is rolled out for four years. It has to be noted that the introduction of CAPS in January 2012 was expected to bring some changes. Teachers appeared to be frustrated at having spent almost all their holiday time on NCS and GPLS courses, and having had to do that again for CAPS for a day in December.[69] On top of this, the GPLS was entering its 2nd year and would have to be synchronised with the new CAPS era, which, as a refinement and collation of NCS contents, in effect then brought about a three-way integration from January 2012. The latter was experienced as unnecessarily fragmented by most teachers, it seems. Be it as it may, the anticipation was that CAPS would initiate EFAL in Grade 1, and increase the time per day for EFAL to 12-20 min, about 60 min, and 90 minutes per day respectively for Gr 1, 2 and 3 learners. In parallel to this, L1 would be allocated 1 hour 36 minutes per day from Grade 1 (8 hours per week, compared to the 7 and 6 for Numeracy and Life Skills).[70]

When EFAL / L2 is taught, the principle is to disallow code-switching.

Regarding the observed teachers' training:

- Gr 3 EFAL teacher:

JPTD – Junior Primary Teachers Diploma (Transvaal College of Education* - Soshanguve)

Got taught to teach all FP (junior primary) subjects and languages, including the didactics of each subject (26, 22 and 18 respectively in Years I, II and III of the course).

Her experience included having taught Economic and Management Sciences at the levels of Gr 4, 5 and 7, and Sepedi as L1.

[69] This appeared to be the main motive behind the postponement and time reduction of the CAPS training which was initially due during the spring holidays for four full days.
[70] It seemed that EFAL had not systematically been offered in Grade 1 at that point.

* This teacher thought that the previous teacher-training dispensation had to be brought back. The recent institutional amalgamations saw TCE facilities being re-used by TUTU (absorbed into TUT).

- Gr 1 L1 teacher:

SPTD – Senior Primary Teachers Diploma (Transvaal College of Education)

She got taught to teach Afrikaans, English, History and Biblical Studies. She is presently allocated as a Sepedi teacher in the FP, because of teacher shortages, on strength of Sepedi being her home language, and having had Sepedi as a matric subject (L1).

The above situation also reflects the typical outcome across the whole school to bring teachers with their qualifications and experience together eventually with the classes or subjects that have to be taught to the actual numbers of learners per grade and LoLT. isiZulu (L1) teachers are scarce in the school. After the recent death of an isiZulu teacher, a teacher with isiZulu as home language had to be moved from teaching Social Sciences to teaching isiZulu after special training (HL). Many InterSen (Intermediate and Senior Phase – IP and SP) teachers typically in the same manner teach at the FP.

The teachers voiced their preference, for the sake of the children, that English become the LoLT for as many as possible learners from Grade 1 to prepare them for high school, work and further learning.

Parents in the past also felt strongly that the LoLT in the school should be English from Grade 1. The SGB determined the present school language policy, which the parents accepted since it became known that Sepedi and isiZulu would be taught as L1 and used as LoLT from Grade 1 to 3, while English (as FAL) would be taught from Grade 1 in parallel.

How does HoDs, teachers, the school or policy, structure curriculum management, progression and coverage, assessment, monitoring the work, learners' dropping behind, etc.? --- Within a given week, for language, the aspects of listening, speaking, reading and writing (phonics) all have to be covered. Daily lessons are all built around the thematic contents / context of a selected theme for the week. The modes of teaching (lesson structure, etc.) also have to be varied to cover shared and guided reading, writing, handwriting, activities, exercises (assessment) and a range of modes of didactical or pedagogical transfer.

In Grade 3, for instance, the "shared-reading" lesson, as observed, entailed that the teacher read each new piece twice, having pointed out some new vocabulary also in advance. Learners then, as whole group, also read the new passages twice. Joint and individual opportunity could be allowed. After that the teacher confirms learning by again reading all sentences twice. Provision is also made for accidental reading / vocabulary outside the prescribed coverage that are encountered in the process. The children in this case worked from a set of about 8 pages (pictures and text) collated into their individual flip-files. Coverage for the week was structured to dovetail from the first to the next day with some overlap, i.e., pages 1-3 on Day 1, pages 2-4 on Day 2, etc., to allow confirmation and revision of previously learned parts.

What is the broad sequence for language learning and teaching progression over this year? --- As per GPLS stipulations, L1 coverage in Sepedi is spread over Grades 1 and 2 towards teaching all the vowel and consonant sounds, which at the later stages include di- and tri-graphs. A copy of the observed lesson's plan was obtained and showed the variety of language aspects covered.

Where did the Gr 3 / 1 lesson fit into overall curriculum coverage and sequencing? --- Each lesson forms part of a path linked back to the lesson preceding the observed lesson, and forwards to the one that would follow it.

The Grade 3 topic covered was a group-reading passage (EFAL), amply illustrated by detailed pen sketches, on the topic of games, the Lotto and being able to read and write. The language-teaching objective was to improve vocabulary, and achieve greater proficiency of pronunciation, fluency and spelling. The mode of the lesson was largely group-focused.

Broadly the same vocabulary and fluency objectives applied to the Grade 1 – Sepedi HL/L1 lesson. The language-teaching objective was to master the "kg" consonant combination, and focused on words containing it. Looking at flash cards (pictures and words), and what the teacher wrote on the chalkboard, mainly structured the lesson.

[Note: the HoD / Gr 3 teacher suggested that the systemic routine and progression of building all the next proficiencies on all the previous ones is what makes for successfully becoming language proficient. In that sense, it is a systematic and well-structured routine "slog", with lots of scaffolding and stepped progress, retrospective confirmation, and gradually enhanced complexity, speed and proficiency. No single "event" or moment or point or technique can be said or employed (expected) to bring sudden illumination to learners.]

With regard to learning materials, Vivlia under GPLS produced and supplied all the Sepedi Grade 1 teacher guides, learner workbooks and readers in terms of the GPLS. However, nothing is available from such quarters for EFAL in Grade 3 as EFAL material was not provided in the GPLS. The teacher improvises from any materials she can lay her eyes on.

The two teachers concurred, especially in relation to teaching at the level of Grade 1 and 2, that the most illuminating or productive moments of language transfer and learning take place when multiple senses are stimulated among learners, and when a variety of modes are used. This means that for key insights learners have to feel/touch, see, vocalise and act out contents associated with the point of learning.

Those coming into school from Grade R have a definite propensity for stronger learning.

The Grade 3 teacher considered the best analogy to describe what teaching and learning is about in FP as extending, as it were, the home space where a toddler is always around the mother or other caregivers, and mimics and learns everything in her stride. This not only accounts for language, but also social and other behaviours, attitudes, etc. The only hope that the teachers can have is that when a child's contact with the school has ended, some of the mimicked behaviours and values, and the acquired knowledge, would be put to good use by the learners in the outside world, being high school, further studies, work, social structures, etc.

Parent involvement is seen to be good at this school, and is often structured around fundraising or cultural events. In terms of what has been noted in the previous paragraph, the school makes a point to invite ex-learners, parents, community members, etc., as speakers and visitors to illustrate through their present achievements in society to which heights it is possible to take their earlier experiences in the same community.

The Gr 3 teacher provided us with a deliberate sample of two each of the weakest, average and best of the marked learner assignments given at the end of her lesson. What was immediately evident is that inaccurate pronunciation and as yet an incomplete sense of the conventions for the use of English graphemes and phonemes are equally responsible for most spelling mistakes, where choices were based on some phonetic sense of what the correct spelling should be.

Examples of guessing about spelling, based presumably on slightly distorted pronunciation deviations from “Oxford”/standard English, are: “chach” and “chush” for church, “conna” for corner (if the end ”a” is perceived as exaggerated); “redio” for radio; “lisen” for listen.

Examples of following appropriate pronunciation but not knowing enough of English’s many spelling conventions, and even exceptions, are: “lisin” for listen; “conna” for corner (in the absence of knowing more about the many sounds for “e”); “moning” for morning.]

Annexure 6: Classroom observation – Verbatim transcription of video footage – Gr 3 EFAL (Soweto; 6 Aug 2012) – "At the Zoo"

Spoken words: verbatim transcription	Activity / action; non-verbal behaviour (*also sometimes in single merged columns*)
121. Teacher waits for one learner to enter; then closes the classroom door.	
122. Teacher: "Stand up."	Friendly; not as an order.
123. Learners do so noisily (pushing of chairs over the floor). Teacher wipes her cheeks with her hands in a slightly nervous gesture. She checks the clock against the chalkboard, and starts talking.	
124. T: "It's about twelve'o clock. ... Good afternoon, learners."	
125. Ls: "Good afternoon, Teacher, and good afternoon, classmates."	
126. T: "How are you, children?"	
127. Ls: "I am fine, thanks; and how are you, Teacher?"	
128. T: "I'm fine, thanks. You had some of your lunch. You're fuelled/filled(?) up, ne?"	
129. Ls "Yes."	Teacher checks door; she lets in a boy.
130. T: "All right. We mu... We're going to sing; only for three times .... three times only, ne, so that you can exercise and feeling our bodies. OK?"	T gestures with arms; claps her hands once. Then shows 3 fingers of one hand. T moves her arms in small circles.
131. Ls: "Yes."	
132. T: "Just face your partner."	
133. Ls: "Oooh!"	Learners face each other at each desk.
134. T: "Someone who doesn't have a partner? OK."	T organises one pair of learners.
135. T: "We sing twice, ne? And hum once. ... We sing twice and we hum once, ne? Right. Face your partner. Clap together left ...two ..."	
136. Ls: "Clap together <u>left</u>; clap together <u>right</u>; clap together <u>left</u> and <u>right</u>; clap together <u>both</u>."	Learners clap own hands in rhythm, but across on their partners' hands on the underscored words in the typical children's clap game. Ls maintain the clapping pattern when humming. Teacher mouths the words to keep them in rhythm.
137. Ls: "Clap together <u>left</u>; clap together <u>right</u>; clap together <u>left</u> and <u>right</u>; clap together <u>both</u>."	
138. Ls: "Mmm mmm <u>mmm</u>; mmm mmm <u>mmm</u>; mmm mmm <u>mmm</u> & <u>mmm</u>; mmm mmm <u>mmm</u>."	
139. T: "For the last time."	
140. T & Ls: "Mmm mmm <u>mmm</u>; mmm mmm <u>mmm</u>; mmm mmm <u>mmm</u> & <u>mmm</u>; mmm mmm <u>mmm</u>."	A boy is off-beat and hits his partner's hands too hard, clearly upsetting him.
141. T: "Thank you! All right!"	Learners sit down.
142. T: "Quickly, the boys take their chairs and move forward ... without making noise!" Just take out your chairs. Don't make noise!	The boys all do so and go sit in a row or two close to and facing the chalk board. [03:00]
143. T: "All right. ... (unclear)"	T organises the boys, and they sit down.
144. T: "Girls, take up your chairs." (Half a minute goes by)	The girls move in behind the boys.
145. T: "All right, don't make noise!"	T moves some desks a little backwards.
146. T: "Who is making noise? T, are you making noise."	Ls become a bit noisy; chairs and voices.
147. T: "OK. ... Good. ... Shhh ... ... Shhh ..." (Another 40 seconds pass)	T further organises them, moving back more chairs and some bookcases.
148. L: "(unclear)"	A boy tries to ask something.
149. T: "Thank you! ... And move backwards; ... backwards."	T pushes her arm and open hand away in front of her body. [05:10]
150. T: "It's English time."	

Spoken words: verbatim transcription	Activity / action; non-verbal behaviour (*also sometimes in single merged columns*)
151. Teacher collects something from a boy and puts it behind her desk. She fetches a poster with pictures and some loose "cards" from the back of the classroom. She keeps the poster folded in half.	
152. L: "At sea. ... (unclear)"	
153. T: "No, Itome. This is at zoo. OK. I've got my poster here."	
154. Ls: "Oooh."	Learners are very attentive.
155. T: "I know you know that poster, ne?"	
156. Ls: "Yes."	
157. T: "So-oo. ...(Unclear name) has already told us we've got our poster."	T also separates the "cards" from behind the still-folded poster.
158. Ls: "At zoo."	Few learners have their hands in the air.
159. T: "At zoo."	
160. Ls: "At zoo."	
161. T: "Who told you, because I didn't show it."	
162. L: "At the zoo."	
163. T: "Uh."	
164. Ls: "At the zoo."	A boy claps his hands in excitement.
165. T: "At the ...?"	
166. Ls: "... zoo."	
167. T: "... zoo. We're going to look at our poster: 'At the zoo'."	T moves to the side of the chalk board.
168. She opens the poster and fixes it to the board with magnets.	
169. T: "Remember last week, ... we listed the names of the animals that are found in the ... zoo. Who can tell me which animals do we get at the zoo?"	A few learners raise their hands. Teacher still has her back to the class while affixing the poster.
170. Ls (one by one): "Giraffe .. Camel .. Stork .. Pelicans .. Lion."	Excitement is high among the learners.
171. T: "All right. I'm going to show you ... our poster is at the ..."	
172. Ls: "... zoo."	
173. T: "... zoo."	Teacher affixes an "At the zoo" card above the poster. [07:00]
174. T: "What do we get from the zoo?"	
175. Ls: "Animals."	Many learners raise their hands.
176. T: "Animals. This is our poster ... and this is the animals that are found in the ... zoo."	T ensures that the magnets and poster alignment are fine.
177. Ls: "The zoo."	
178. T: "Which animals do you see there?"	
179. L: "Monkey!"	Shouted out loud.
180. T: "Tathembe."	
181. L: "Horse."	Other learners follow the first.
182. T: "The horse ... This is the horse."	Teacher finds and points to the horse.
183. L: "Monkey!"	Shouted out loud.
184. T: "Lebohang. The monkeys. Where are the monkeys? Come and quickly and show me the monkeys. I don't see the monkeys."	Teacher points to a boy, who comes and shows the monkeys, making a "Tsh-tsh" sound. The other learners laugh.
185. T: "Oh. These are the ... monkeys. T?"	
186. L: "Giraffes."	[07:44]
187. T: "Giraffes. How many giraffes are there?"	Many learners raise their hands.
188. Ls: "Three."	

Spoken words: verbatim transcription	Activity / action; non-verbal behaviour (*also sometimes in single merged columns*)
189. T: "Three giraffes. Come and quickly (... unclear ...) show us the giraffes. ... The giraffes. Good! These are the ... giraffes. ... A?"	A boy comes and shows the giraffes.
190. L: "Pelicans."	
191. T: "Pelicans. What are the pelicans?"	
192. L: "The bird. ... Birds."	Two different learners.
193. T: "Oh, the pelicans are the birds. Come, K, show us the pelicans. ... Show us the pelicans. Good! These are the ...?"	A learner comes and shows the pelicans.
194. Ls: "Pelicans."	
195. T: "... pelicans. With a yellow ...?"	T gestures a sack below her chin.
196. Ls: "... mouth."	
197. T: "Beak. A bird has a beak. ... Yah?"	Many learners raise their hands eagerly.
198. L: "Camel."	
199. T: "The camel. S, show us the camel. I don't see the camel. ... Good! This is the camel. The camel comes through the door. And there are two camels. ... K?"	The learner comes and points to the camel.
200. L: "Springbok."	
201. T: "Springbok. The bucks. Show us, Z ... the bucks. Quickly come and show us the bucks."	A girl learner points out the bucks.
202. T: "These are the animals that we listed last week, isn't it?"	The learners look very happy.
203. Ls: "Yes."	
204. T: "These are the bucks. OK? The last one. And a <u>big</u> one."	Stretching out the word 'big'. [09:00]
205. Ls: "Yes."	With emphasis, almost as "Yiss."
206. T: "A. ... A."	
207. L: "Elephant."	
208. T: "Elephant. ... C, come and show us, quickly, the ... f ... elephant." Good! This is an ...?	Learner points out the elephant.
209. Ls: "Elephant."	
210. T: "... elephant."	
211. Ls: "Lion."	
212. T: "And the lions. OK, the last one. Who can come and show us the lions? No, I pointed to you. Yes, M."	Every learner raises a hand; very eager. Learner comes/points out wrong animal
213. T: "The li... . Oh! .... Good! These are the lions. The lions are very dangerous. That is why they put them in the cage, because they are so dangerous. ... Also the zebras. Those are the animals that we listed ... uh ... last week."	The class laughs, but the learner corrects the mistake quickly. One more learner raises a hand. [10:00]
214. L: "Ma'am, I called you (←unclear) the bear."	
215. T: "Oh, the bears. Ooh, there were so many animals that we listed, ne."	Learners are offering a few more; inaudible.
216. T: "So today, ... we are going to look now at the persons ... different types of persons. The woman touched the elephant's ..."	
217. Ls: "Trunk."	
218. T: "... trunk. The woman touched the elephant's trunk. This is the woman who touched the elephant's trunk. ... Who touched the elephant's trunk?"	Teacher collects some cards. She pastes a yellow arrow to show the woman.
219. Ls: "The woman touched the elephant's trunk."	Slowly; almost word for word.
220. Ts: "The woman touched the elephant's trunk? ...- the	Unclear: "mouth" could have been

Spoken words: verbatim transcription	Activity / action; non-verbal behaviour (*also sometimes in single merged columns*)
mouth of an elephant. That is an elephant's ...?"	spoken as "nose" too?
221. Ls: "Trunk."	
222. T: "... trunk. This is an elephant's trunk. But this is the woman who touched the elephant's trunk."	Teacher points to the trunk. A few learners chorus part of the sentence.
223. Ls: " ... the elephant's trunk.	
224. T: "The boy ... rode ... the horse ... slowly."	The learners start chorusing along with the repeated sentence.
225. T & Ls: "The boy ... rode ... the horse ... slowly."	
226. T: "This is the boy who rode the horse slowly. ... This is the boy who rode the horse slowly. What did the boy ride slowly?"	T sticks a green arrow to the poster to indicate the boy.
227. Ls: "The boy ..."	
228. T: "What did the boy ride slowly?	
229. Ls: "The boy ride ..."	
230. T: "No. The boy ..."	
231. T & Ls: "The boy rode the horse slowly."	
232. T: "Who rode the b... the ... the ... horse slowly? Z?"	
233. L: "The boy rode the horse slowly."	
234. T: "Good! The boy rode the horse slowly. ... The girl <u>ran</u> fast with her ice creams."	The teacher emphasises 'ran' heavily.
235. T & Ls: "The girl ran fast with her ice creams".	
236. T: "This is the girl with the red dress ... ran fast with her ice creams."	Teacher pastes white arrow on poster to indicate the girl.
237. T & Ls: "The girl ran fast with her ice creams."	A few learners chime in all along.
238. T: "What did the girl do? N? What did the girl do? The girl ..."	
239. L: "The girl ran fast with her ice creams."	
240. T: "Good! The girl ran fast with her ice creams. Who ran fast with her ice cream? ... with the ice creams?"	
241. Ls: "The girl ran fast with her ice creams."	
242. T: "Good! The little girl ... cried ... loudly. The little girl ... cried ... loudly. This is the little girl, with the pink dress. The little girl cried loudly. What did the little girl do? S?"	[13:00] T affixes a light green arrow.
243. L: "The little girl cried loudly."	
244. T: "Class."	
245. T & Ls: "The little girl cried loudly."	
246. T: "The mother talked to her baby. The mother ... talked ... ... talked ... The mother talked to her baby. This is the mother who talked to her baby. But the father is carrying the baby, ne? This is the mother who talked to her baby. This is the baby ... This is the mother who talked to her baby. And the father is carrying the baby.	Teacher affixes an orange arrow to indicate the mother. The teacher points them out with her finger.
247. T: "What did the mother do?"	[14:14]
248. Ls: "The mother ..."	
249. T: "Class, what did the mother do?	
250. Ls: "... talked to her baby."	
251. T: "Who talked to her baby?"	
252. Ls: "The mother talked to her baby."	
253. T: "The mother talked to her baby. ... The man ... walked ... towards ..."	
254. Ls: "The steps."	

Spoken words: verbatim transcription	Activity / action; non-verbal behaviour (*also sometimes in single merged columns*)
255. T: "... the steps. The man walked towards the steps. This is the man, and the woman, and the baby. But this is the man who walks towards the ..."	Teacher affixes a blue arrow to the poster to show that.
256. Ls: "The steps."	
257. T: "... the steps. The man is going to climb the steps. Now, the man ... walked ... towards the steps."	Teacher adjusts the blue arrow on the poster to show that.
258. Ls: "The steps."	
259. T: "Who walked towards the steps?"	
260. Ls: "The man walked towards the steps."	
261. T: "The man walked towards the steps. What did the man walk towards? What did the man walk towards?"	
262. Ls: "The man walked towards the steps?"	
263. T: "... towards the steps. [] Those were the sentences that ... we did it for today. Now, I'm going to ask the less.. ... the ... the ... the questions to see that the ... the ... whether you were asleep or not. Isn't it? Right."	[15:35] [16:00]
264. T: "This is the ...?	Teacher removes the white arrow.
265. Ls: "Girl."	
266. T: "This is the ...?"	
267. Ls: "Girl."	
268. T: "What is the girl doing?"	
269. Ls: "The girl ran fast with her ice creams."	
270. T: "Good! The m.. ... The girl ran fast with her ice creams. 'Ice creams', because she has two ice creams."	
271. Ls: "Ice creams".	
272. T: "Good! What did the woman do?"	Teacher removes yellow arrow.
273. Ls: "The woman touched the elephant's trunk."	
274. T: "M, what did the ele... ... What did the woman do? ... Tell me, Ma."	
275. L: "The woman touch the eleph ..."	
276. T: "Touched. The woman touched the elephant's trunk. This is the woman, with the purple dress, who touched the elephant's trunk."	
277. Ls: "Trunk."	
278. The teacher puts the yellow arrow back on the poster, and removes the green one.	
279. T: "Who rode the horse slowly?"	
280. Ls: "The boy rode the horse slowly."	
281. T: "The boy rode the horse slowly. This is the boy who rode the horse slowly- ... with the green cap and the yellow shorts. This is the boy who rode the horse slowly. This is the horse ... . You know the horse? You can see the horses in the location, ne? Then, what is the woman doing?"	Teacher puts the green arrow back. Teacher removes the orange arrow.
282. Ls: "The woman talked to her baby."	
283. T: "The woman talked to her baby. And who is carrying the baby?"	
284. Ls: "The father ... "	
285. T: "Who is carrying the baby?"	
286. Ls: "The father ... "	
287. T: "L. ... L. Who is carrying the baby? Because now the mother talked to her baby."	

Spoken words: verbatim transcription	Activity / action; non-verbal behaviour (*also sometimes in single merged columns*)
288. Ls: “Father.”	
289. T: “Who is carrying the baby? ... ... M, who is carrying the baby?”	Teacher points with the orange arrow.
290. L: “The father.”	
291. T: “The father is carrying the ...?”	
292. Ls: “Baby.”	
293. T: “... baby. Good! The woman talked to her ... to her ...”	
294. Ls: “Baby.”	[18:00]
295. T: “To her baby. ... What is the girl ... What is the little girl do?”	
296. Ls: “The little girl cried loudly.”	Some learners say ‘cry’.
297. T: “The little girl cried ...”	
298. Ls: “... cried loudly.”	
299. T: “... loudly. Can you explain why did the girl cried loudly? What is happening there? What does the grandfather ...? What is the grandfather doing?”	
300. Ls: “The ...”	
301. T: “Hands up! Innocent? The grandfather is pulling her ...?”	
302. Ls: “Dress.”	
303. T: “... dress. The grandfather is pulling her dress. Now the little girl cried loudly. And that is the grandfather. Now the little girl cried loudly. ... The last one. Who is walking towards the steps?”	The teacher removes the blue arrow.
304. Ls: “The man walked towards the steps.”	
305. T: “What did the man do?”	
306. Ls: “The man walked towards the steps.”	
307. T: “The man walked towards the ...”	
308. Ls: “Steps.”	
309. T: “... steps.	[19:00]
310. T: “If you notice those verbs ... ‘touched’ ... ‘walked’ ... ‘cried’ ... ‘rode’ ...”	
311. L: “Ran.”	
312. T: “Ran. Good! Those are the verbs in the past tense. It ... Those ... It was ... It happened, ne, because ... in ... in ... in the present tense, you will say: ‘The woman touch ... But because it’s in the past tense we say: ‘The woman touched’... The girl ran ... But we are supposed to say? Hands up.”	The teacher points to the poster.
313. Ls: “Run.”	
314. T: “Run. Good! The girl runs, ne? The girl runs. This is the girl who ran with her ice creams.”	Teacher points with blue arrow on the poster.
315. T: “Then in the case of ... ‘cried’. ... What we are supposed to say in the present tense?	
316. Ls: “Cry.”	
317. T: “Cry. Good! Because the past tense of ‘cry’ is ‘cried’. Remember the verbs are the doing words. Then, the wom.. ... the man walked towards the ...”	A few learners echo ‘doing’.
318. Ls: “Steps.”	
319. T: “. steps. Walked.. What is the past .. the present tense?”	
320. Ls: “Walk.”	

Spoken words: verbatim transcription	Activity / action; non-verbal behaviour (*also sometimes in single merged columns*)
321. T: "What is the past tense and what is the present tense? Did you notice that? All the verbs are in the past tense. ..."	
322. T: "... So, this is the end of our lessons. We're going to see each other tomorrow for the phonics. Stand up."	The learners stand up. [21:00]
323. T: "Goodbye, children."	
324. Ls: "Goodbye, Teacher."	
325. T: "Goodbye, children."	
326. Ls: "Goodbye, Teacher."	
327. T: "Goodbye. Take your chairs and go back to your ... tables."	Noise as the learners do so.

Annexure 7: Grade 1 Sepedi lesson (GP): Topic: - The sound of "kg"

Sepedi	English	Actions / non-verbal
1 Teacher: "Dumelang bana ba ka."	Teacher: "Good morning my children."	The teacher moves about in class
2 Learners: "Ashe."	Ls:"Morning."	(same …)
3 Teacher: "Lekae?"	T:"How are you?"	
4 Ls: "Re teng."	Ls:"Fine."	
5 T: "Re teng. La bona gore re na le baeng kajeno akere?"	T: "Fine. As you can see we have visitors today. Is that so?"	
6 Ls: "Yes."	Ls: "Yes."	
7 T: "Ge le tsena ka mo klaseng yaka, ke khopela gore le seke la misbehaver. Le itshwareng pila, a kere bana ba ka."	T: "When you are in my class, I am asking you not to misbehave. Behave yourself, is that so my children?"	
8 Ls: "Yes."	Ls: "Yes."	
9 T: "Akere re ne re ile gae for weekente."	T: "You were at home for the week-end?"	
10 Ls: "Yes."	Ls: "Yes."	
11 T: "Jaanong ke batla gore le mpotse gore ko gae go ne gole byang ka weekente. And ke nyaka letsogo ko godimo. Ga ke battle se o bolela …(unclear) Akere." … "M re botse gore week-end ya gago e ne e le byang. Ne gole byang ko gae ka week-end.	T: "Now I want you to tell me how was it at home duirng the week-end. And I want you to raise your hand. I do not want ……..(Unclear), is that so?" … M, tell us how your week-end was.How was it at your home during the week-end?"	
12 L: "…….(unclear)"	L: "…….(unclear)"	
13 T: "Emella o mpotse."	T: "Stand up and tell me."	
14 L: "……(unclear)"	L: "……..(unclear)	
15 T: " Ne o etsang?"	T: "What were you doing?"	
16 L: "…….(unclear)"	L: "…….(unclear)"	
17 T:"Ne o ile kerekeng?"	T: "Did you go to church?"	
18 L: "Ne ke ile kerekeng."	L: "I was at church."	
19 T: "OK, M are ne a ile kerekeng. Akere. … And then M, re botse gore wena ne o ile kae?"	T: "OK,M says she was at church. Is that so? … And then M, tell us about where you were."	Moima, the learner got up.
20 L: "…….(unclear)" (Moima o emeletse)	L: "……..(unclear)"	
21 T: "M a re ena ne a raloka. Akere."	T: "M says he was playing, is that so?"	
22 Ls: "Yes."	Ls: "Yes."	

Sepedi	English	Actions / non-verbal
23 T: ”And then L wena ne o etsang ka week-end? “Why o khupeditse mo letsogong, tlosa molomo.”	T:”And then you, L, what were you doing during the week-end? Why do you cover your mouth, remove (?) from mouth.”	
24 L: ”……..(unclear)”	L: ”……(unclear)”	Letta got up.
25 T:”Oh, O ne o raloka. OK. And then P re botse gore wena o ne o etsang ka week-end?”	T: ”Oh, you were playing. OK. And then, P, tell us about what you were doing during the week-end.”	
26. L:”…..(unclear)”	L: ”…..(unclear)”	Precious got up.
27. T: ”Ne o dlala?”	T:”You were playing?”	
28 L: ”……..(unclear)”	L: ”……(unclear)”	
29 T: ”OK, alright Hê, Akere e ne e le weekente, ne re ile dikerekeng, go le monate, re tshameka, Akere?	T: ”OK, allright, Heh, Is that so that it was week-end, we were at church, it was interesting, we were playing,is that so?”	
30 Ls: “Yes.”	Ls: ”Yes.”	
31 T: ”Fine, OK. Le a gopola tsela tsa last week, Mantswe a le, a neng ke le rutang ona,akere.	T: ”Fine, OK. You remember those of last week, those words, those that I taught you? Is that so?”	
32 Ls: ”Yes.”	Ls: ”Yes.”	
33 T: ”Kana modumo ole wa last week o o neng re o etsang, ke modumo wa eng?”	T: ”By the way, what is that sound that I taught you last week? Which sound is that?”	
34 Ls: ”g”	Ls: ”g”	
35 T: “He e, awaa! modumo o ne re o etsang, o go kgale re o fetile. Modumo o neng re o etsang?	T: ”No, no! The sound that we did, we already dealt with that one.The sound that we were doing?”	
36 Ls: “Mam……(unclear)”	Ls: ”Ma’am……..(unclear)”	
37 T: “Ke tsela, Ke nyaka, ke nyaka o neng re o etsang last week. O o neng re o ngwalang ka mo gare ga buka.	T: ”Those ones, I want, I want the one that we dealt with last week. The one that we wrote in the book.”	
38 Ls: ” Mam.”	Ls: ”Ma’am.”	
39 T: ”S?”	T: ”S?”	
40 Ls: ‘Mam…..(unclear)”	Ls: ”Ma’am……(unclear)	
41 T: “Byala. Ne re etsa, re boletse ka byala. And then o mong gape gape”	T: ”Alcohol. We talked about alcohol. And then other one again, again.”	
42 L: ”Mam, mam…….(unclear)”	L: ”Ma’am, ma’am ……..(unclear)”	
43 T: ”Byang, Are byang. N.”	T: ”Grass. He says grass. N.”	
44 L: ”Mam, Byang.”	L: ”Ma’am, Grass.”	
45 T: ”Byang, ba e boletse byang. Ke batla e nngwe gape gape.”	T: ”Grass, grass has already been mentioned.I need the other one again, again.”	
46 L: ” Mam, Byoko.”	L: ”Mam, brain.”	

Sepedi	English	Actions / non-verbal
47 T: “Byoko, kana byoko bo mo kae? A re itshwareng mo byoko boleng mo teng. Ke mo, akere?”	T: ”Brain, by the way where do we find the brain? Let us touch the area where the brain is. It is here? Is that so?”	The teacher and the learners touch the area on the head where the brain is situated.
48 L: “Eng.” (Ba itshwara mo tlhogong)	Ls: ”Yes.” (They touch their heads)	
49 T: “Ke kgopela ba babedi ba ka nketsetsang mafoko ka mantswe a le a rena a beke e e fetileng. A ka nketsetsang mafoko, ka mantswe a le, ka byoko, ka byang, le ka byala. Nketsetsa mafoko. T?”	T: ”Can I please have two learners who would build sentences with the words treated last week? Those who can build those sentences with brain, grass and with alcohol. Build sentences. T?”	
50 L: “Tate o na le byoko.”	L: ”Dad has got brains.”	
51 T: ”Good. Tate o na le byoko. Enge?”	T: ”Good. Dad has got brains. What?”	
52 Ls: ”Byoko.”	Ls:”Brains.”	
53 T: ”He e, Tate o na le byoko.Enge?	T: ”No, no, Dad has got brains. What?”	
54 Ls:”Tate o na le byoko.”	Ls: ”Dad has got brains.”	
55 T: “Le lengwe gape gape lefoko. M?”	T: ”Another sentence, again, again. M.”	
56 L: ”Ntate o nwa byala.”	L: ”Dad is drinking alcohol.”	
57 T: ”Ntate o nwa byala, enge?”	T: ”Dad is drinking alcohol, what?”	
58 Ls: ”Ntate o nwa byala.”	Ls: ”Dad is drinking alcohol.”	
59 T: ”Enge?”	T: ”What?”	
60 Ls: ”Ntate o nwa byala.”	Ls: ”Dad is drinking alcohol.”	
61 T: “Good. Bjaanong ge, akere beke e nngwe le e nngwe re etsa mantswe a mampsha, akere?”	T: ”Good. Now,as you know every week we do new sounds, is that so?”	
62 Ls: ”Yes.”	Ls: ”Yes.”	
63 T: ”Re etsa leletere le lempsha, akere?”	T: ”We do new alphabets (letters?), is that so?”	
64 Ls: “Yes.”	Ls: ”Yes.”	
65 T: ”Le a itse gona le pina e nngwe so, nkile ka le ruta yona. Mara ga ke sa gopola gore le a e itse naa? Le nkutlwelleng, ne!”	T: ”You know that there is a certain song so, I once taught you that song. But I do not think that you still know it. Listen to me, ne!”	
66 Ls: ”Yes.”	Ls: ”Yes.”	
67 T: ”Ja, le nkutlwelleng.”	T: ”Now listen to me.”	
68 (Same)	(A long pause, whereby the teacher is busy taking the yellow poster containing the song and then pasting it on the board)	(Same)

Sepedi	English	Actions / non-verbal
69 T: ”Ke pina ya ka e, Ke nyaka go le gopotsa yona. Sale re e etsa kgale ka bo January so, ne! O nkutlwelle. Wa itse yona e reng? E re.	T: ”This is my song (me singing?). I want to remind you of that song. We once did it in January so, ne! Listen to me. Do you know how it goes? It goes like this.	
70 Kgomo motswala Ya malome motswala We kgape motswala We kgame motswala E na le maswi motswala E re kga kga kga kga E re kga kga kga kga	A cow ,cousin Which belongs to my uncle, cousin Herd it, cousin Strangle it, cousin It has got milk, cousin Do it kga, kga, kga, kga Do it kga, kga, kga, kga	
71 Kgomo motswala. O nkutlwelle geke e opela, akere?”	T: A cow, cousin. Just listen to me when I sing it. Is that so?”	
72 L: ”Yes.”	L: ”Yes.”	
73 T:” O nkutlwelle geke e opela. Kgomo motswala Ya malome motswala We kgape motswala We kgame motswala E na le maswi motswala E na le maswi motswala	T: ”Listen to me when I sing it. A cow ,cousin Which belongs to my uncle, cousin Herd it, cousin Strangle it, cousin It has got milk, cousin It has got milk, cousin	
74 Jaanong o ntebelle geke etsa action, akere? Ke tlo re:	Now look at me when I do the actions, is that so? I am going to do this:	
75 Kgomo motswala Ya malome motswala We kgape motswala We kgame motswala E na le maswi motswala E na le maswi motswala.	A cow ,cousin Which belongs to my uncle, cousin Herd it, cousin Strangle it, cousin It has got milk, cousin It has got milk, cousin	The teacher sings the song demonstrating the actions to be followed.
76 O nkutlwile?”	Did you hear me?”	
77 Ls: ”Yes.”	Ls: ”Yes.”	
78 T: ”Re ka e leka?”	T: ”We can try it.”	
79 Ls: ”Yes.”	Ls: ”Yes.”	
80 T: ”A re emelleng.”	T: ”Let us stand up.”	
81 Ls: ”Yes.”	Ls:”Yes.”	The learners stand up.

Sepedi	English	Actions / non-verbal
82 T: ”Ga re rase ne! A re yeng.”	T: ”Let us not make noise,ne! Let us go.”	
83 T & Ls: “Kgomo motswala Ya malome motswala We kgape motswala We kgame motswala E na le maswi motswala E na le maswi motswala	T & Ls: ”A cow ,cousin Which belongs to my uncle, cousin Herd it, cousin Strangle it, cousin It has got milk, cousin It has got milk, cousin	Learners follow the teacher`s action and sing the song.
84 T: ”A reye gape gape.”	T: ”Let us do it again and again.”	
85 T & Ls: “Kgomo motswala Ya malome motswala We kgape motswala We kgame motswala E na le maswi motswala E re kga kga kga kga E re kga kga kga kga.”	T & Ls: ”A cow, cousin Which belongs to my uncle, cousin Herd it, cousin Strangle it, cousin It has got milk, cousin Do it kga,kga,kga,kga Do it kga,kga,kga,kga.”	
86 T: ”Gape.”	T: ”Again.”	
87 T & Ls: ”Kgomo motswala.”	T & Ls: ”A cow my cousin.”	
88 T:”Le e tshwere?”	T: ”Have you mastered it?”	
89 Ls: “Eng.”	Ls: ”Yes.”	
90 T: ”Le e tshwere?”	T: ”Have you mastered it?”	
91 Ls: ”Yes.”	Ls: ”Yes.”	
92 T: ”Le a e utlwile gore e monate bjang?”	T: ”Did you understand how interesting it is?”	
93 Ls: “Yes.”	Ls: ”Yes.”	
94 T: “A reyeng he. Le a e bona kgomo, Akere!”	T: ”Let us go then. Do you see the cow, is that so?”	
95 Ls: ”Yes.”	Ls: ”Yes.”	
96 T: ”A re yeng,he! A re ye, kgomo.”	T: ”Let us go then. Let us go, cow.”	
97 T & Ls: ” Kgomo motswala Ya malome motswala We kgape motswala We kgame motswala E na le maswi motswala E na le maswi motswala E re kga kga kga kga	T & Ls: ”A cow, cousin Which belongs to my uncle, cousin Herd it, cousin Strangle it, cousin It has got milk, cousin It has got milk, cousin Do it kga,kga,kga,kga	Teacher and learners sing with actions.

Sepedi	English	Actions / non-verbal
E re kga kga kga kga E re……..(interrupted)”	Do it kga,kga,kga,kga Do it ……(interrupted)…..”	
98 T: ”Good. A re nneng fa fatshe, he!	T: ”Good. Let us sit down, then!”	Learners sit down.
99 T: ”Re e utlwile kosha ele, akere!	T: ”We did hear the song, is that so?”	
100 L: ”Yes.”	Ls: ”Yes.”	
101 T: ”A kere le e utlwile?	T: ”You did hear the song, is that so?”	
102 L: ”Yes.”	L: ”Yes.”	
103 T: ”Byaanong e bolela ka eng kosha e le. Ke mang o a ka mpotsang? M?”	T: ”Now, what does that song entail? Who can tell me? M?”	
104 L: ”Ka malome.”	L: ”About the uncle.”	
105 T: ”E bolela ka malome, ke nnete gore e bolela ka malome?	T: ”It is about the uncle, is that true that it is about the uncle?”	
106 Ls: ”No no.”	Ls: ”No,no.”	
107 T: ”E bolela ka malome?	T: ”Is it about the uncle?”	
108 Ls: ”He e, Mam, Mam.”	Ls: ”No, no, Ma’am, Ma’am.”	
109 T: ”S?”	T: ”S?”	
110 L: ”Mam, Mam …….(unclear).”	L: ”Ma’am, Ma’am ……..(unclear).”	
111 T: ”He e, A re utlwelleng, S o nyakile a traya.	T: ”No, No, let us listen, S nearly tried.”	
112 L: ”Mam, Mam.”	L: ”Ma’am, Ma’am.”	
113 T: ”Eh, M?”	T: ”Eh, M?”	
114 L: ”Kgomo.”	L: ”Cow.”	
115 T: ”E bolela ka kgomo. Ke kgopela ge o araba o emelle. Akere! E bolela ka kgomo gore kgomo? Ge o e kgapa, o e kgama, e na le maswi, akere. Ke kgomo ya mang? Ya malome,a kere?”	T: ”It is about a cow. May you please stand up when you answer, is that so? It is about cow - that the cow when you herd it, strangle it, it has milk, is that so?” Whose cow is it?” It is uncle’s, is that so?”	
116 T: ”Byaanong bana ba ka gona mo la ge re lebelletse, akere re a utlwa medumo kgale re etsa medumo, akere? Mpotse gore ke mang o a ka mpotsang gore yena o utlwang o kare ke modumo wa eng o? Ke kgopela gore o emise letsogo la gago. Mb.”	T: ”Now, my children just as we are looking there, is that so, we hear the sounds, we have been doing these sounds, is that so? Tell me who can tell me the sounds that he is hearing? Please raise up your hand. Mb.”	
117 L: ”Kga.”	L: ”Kga.”	
118 T: ”Ke modumo wa enge?	T: ”Which sound is that?”	
119 Ls: ”kg.”	Ls: ”Kg.”	

Sepedi	English	Actions / non-verbal
120 T: ”Ke modumo wa kg. Ke modumo wa eng?”	T: ”It is the sound of kg. Which sound is that?”	
121 Ls: ”Kg.”	Ls: ”Kg.”	
122 T: ”Ke modumo wa eng?”	T: ”Which sound is that?”	
123 Ls: ”Kg.”	Ls: ”Kg.”	
124 T: ”Ke modumo wa kg.”	T: ”It is the sound of kg.”	
125 **08:13-08:22**		There is a long break: The teacher searches for something at her desk.
126 **08:22** T: ”Ke modumo wa rona wa kg. Modumo wa rona wa kg, ke modumo wa rona wa kg.	T: ”It is our sound of kg. Our sound of kg, it is our sound of kg.	Teacher pastes the kg on a yellow poster on the board.
127 Modumo wa rona re o ngwala so.	We write our sound of kg like this.	She writes the sound on the board.
128 Ke tsaya mela e mebedi. ..... Wa e bona a kere? Ke kg.”	K occupies two lines. .... Do you see it, it is kg?”	She writes the kg on the board.
129 Ls: ”Yes.”	Ls: ”Yes.”	
130 T: ”Ge ke go etseditse katse so. ... ge ke go etseditse kgatse,wa bona K e tsaya melaene e mebedi, g e tsaya mmele le mosela. A kere?”	T: ”If I make a drawing of a cat like this. ... If I did draw a cat, can you see that? K takes two lines, g takes the body and the tail, is that so?”	The teacher draws a cat. The teacher points at k on the board. The teacher points at g on the board.
131 Ls: ”Yes.”	Ls: ”Yes.”	
132 T: ”And then ge re lebeletse mo. E ka na re e bitsang?”	T: ”And then when we look here. By the way, what do we call this one?”	
133 Ls: ”K.”	Ls: ”K.”	
134 T: ”Ge e na e nnoshi ke eng?”	T: ”What is it when it is the only one?”	The teacher shows them the alphabet (the letter?).
135 Ls: ”K.”	Ls: ”K.”	
136 T: ”And then e ke eng?”	T: ”And then what is this one?”	Same
137 Ls: ”g.”	Ls: ”g.”	
138 T: ”Ke enge?”	T: ”What is this?”	Same
139 Ls: ”g.”	Ls: ”g.”	

Sepedi	English	Actions / non-verbal
140 T:”Ke g, a kere. And then bale ba ngwalang ka left le wena o ngwala ka left, a kere ka mo ke ngwetse ka right. Ge o ngwala ka left, a shi yona. Wa e bona a kere?”	T: ”It is g, is that so? And then those who are writing with left hand, you writing with left hand, this is it, here I wrote with the right. If you are writing with left, this is it. You see it, is that so?”	The teacher shows them how to write the letters.
141 Ls: ”Yes.”	Ls: ”Yes.”	The teacher writes the kg on the board.
142 T: ”Di a tshwana. A kere?	T: ”They are the same, is that so?”	
143 L: ”Yes.”	L: ”Yes.”	
144 T: ”O berekisitse letsogo la right le letsogo la left for ba le ba basa kgoneng go ngwala. Ge o le kamo o kgona go ngwala ka left ge o le ka mo o kgona go ngwala ka right, a kere?”	T: ”You use the right and the left hand for those who cannot write. When you are this side, you are able to write with the left hand and when you are on this side you are able to write with the right hand, is that so?”	
145 T: ”Modumo wa rona re re ke kg? Ke eng?	T: ”Our sound we say is kg. What is it?	
146 L: ”Kg.”	L: ”Kg.”	
147 T: ”Ke enge?”	T: ”What is it?”	
148 L: ”Kg.”	L: ”Kg.”	
149 T: ”Gape?”	T: ”Again?”	
150 L: ”Kg.”	L: ”Kg.”	
151 T: ”Kg, byaanong go na le mantswe a mang a rena a re a berekisang a kg ne!le go tshwana le kgomo. A kere? Re na le mantswe a rena a go tshwana le kgomo. (Silence) Kgomo ke lentswe la rena la mathomo. Akere?”	T: ”Kg, now, there are certain words which are used with kg ne! for example cow. Is that so? We have words that are the same as cow. (Silence). A cow is our first word, is that so?”	The teacher writes the word cow on the board.
152 Ls: ”Yes.”	Ls: ”Yes.”	
153 T: ”(unclear)..Ke tlo go fa mantswe a ka a,a,a kg. Ashi. kgomo ya rona o a e bona?”	T: ”..(unclear) I am going to give you my words of, of, of kg. Here is our cow, can you see it?”	
154 L: ”Yes.”	Ls: ”Yes.”	
155 T: ”Le a e bona, kgomo ya rena?”	T: ”Can you see our cow?”	
156 Ls: ”Yes.”	Ls: ”Yes.”	
157 T: ”O a e bona, o a e itse kgomo?”	T: ”Can you see it? Do you know a cow?”	
158 Ls: ”Yes.”	Ls: ”Yes.”	
159 T: ”Mo kgomong re kereya enge?”	T: ”What do we find from the cow?”	
160 Ls: ”Mmeleke.”	Ls: ”Milk.”	
161 T: ”Re kereya enge?”	T: ”What do we find?”	

Sepedi	English	Actions / non-verbal
162 Ls: ”Mmeleke.”	Ls: ”Milk.”	
163 T: ”Maswi, re kereya maswi mo kgomong le a e bona lona botlhe re bona kgomo, A kere? Eng. And ke na le lentswe le lengwe gape gape la kg. Ke nyaka go le bontsha lona gape gape. Ke na le (Silence) ke na le lentswe la ka le,lentswe la teng ke kgogo.”	T: ”Milk, we find milk from the cow, can you see it, can you see it all, the cow, is that so? What? And I have another word again, again of kg. I want to show you the word again, again. I have….. (Silence). I have my own word. That word is a chicken.”	Teacher shows them the picture and pastes it on the board.
164 T: ”Ke enge?”	T:”What is it?”	
165 Ls: ”Kgogo.”	Ls: ”Chicken.”	
166 T: ”Ke enge?”	T: ”What is this?”	
167 Ls: ”Kgogo.”	Ls: ”Chicken.”	
168 T: ”Kgogo. A se le lentswe la rena, ke kgogo. Kgogo yona, le a e itse kgogo?”	T: “Chicken. This is our word, it is chicken. Chicken. Do you know the chicken?”	The teacher shows them the picture of the chicken.
169 L: ”Yes.”	Ls: ”Yes.”	
170 T: ”Ke mang a ka mpotsang gore kgogo e re thusa ka enge,kgogo?	T: ”Who can tell us about how the chicken helps us, the chicken?”	
171 Ls: ”Mam, Mam.”	Ls: ”Ma’am, Ma’am.”	
172 T: ”Ashi yona kgogo,kgogo ashi kgogo. K? Kgogo e re thusa ka enge?”	T: ”Here is the chicken, chicken, here is the chicken. K? How does the chicken help us?”	
173 L: ”…….(unclear)”	L: ”…….(unclear)”	
174 T: ”Dijo tse feng? Ke nyaka go itse dijo tseo tsa teng tseo?”	T: ”Which foods? I want to know those foods, which foods?”	
175 Ls: ”Mam, Mam.”	Ls: ”Ma’am, Ma’am.”	
176 T: ”E, R. Kgogo e re …… Ntsha, ntsha pensele mo molomong. Kgogo e re thusa ka enge?”	T: ”Eh, R. The chicken is … take out, take out the pencil from your mouth. How does the chicken help us?”	
177 L: ”Ka mae.”	L: ”With eggs.”	
178 T: ”Ka mae A kere. Kgogo e re thusa ka mae. A shi yona. Bitso la yona a sele yona. Ke kgogo. La le bona a kere?”	T: ”With eggs, is that so? The chicken helps us with the eggs. This is it. This is its name. It is the chicken. Can you see it, is that so?”	The teacher shows them the chicken.
179 Ls: ”Eng.”	Ls: ”Yes.”	
180 T: ”Ra baana le e nngwe gape gape e e nang le kg. Ra baana le ntho e nngwe so. Yona re gella ka yona metsi. Re gella ka yona metsi, re a e rwala. O kereya e re imela.	T: ”We have the other one again, again which has the kg. We have something so. We fetch water with it. We fetch water with it, we carry it. You find that it is heavy. You walk like this	

Sepedi	English	Actions / non-verbal
O tsamaya byaana e go imela …… (unclear). O fitlhela ba bang ba e berekisa ge ba gella ko nokeng. Ba gella ka eng metsi ko nokeng?"	when it is heavy ….(unclear). You find that some people use it when they fetch water from the river. What do they use to fetch water from the river?"	
181 Ls: "Mam, Mam, Mam."	Ls: "Ma'am, Ma'am, Ma'am."	
182 T: "Eh, eh, ba re ke mang? R?"	T: "Eh, eh, who are you? R."	
183 L: "Bakete."	L: "Bucket."	
184 T: "Bakete ke eng ka Sepedi?"	T: "What is bucket in Sepedi?"	
185 Ls: "Mam, Mam, Mam."	Ls: "Ma'am, Ma'am, Ma'am."	
186 T: "M?	T: "M?"	
187 L: "Emere."	L: "Bucket." (directly based on English as well)	
188 T: "Awaa, yona e na le modumo wa kg. Yona re e bitsa kgamelo. Ke enge?"	T: "No, that one has (does not have?) the sound of kg. We call it the bucket. What is it?"	
189 Ls: "Kgamelo."	Ls: "Bucket."	
190 T: "Ke enge?"	T: "What is it?"	
191 Ls: "Kgamelo."	Ls: "Bucket."	
192 T: "Ashi yona, ashi, ashi kgamelo re gella metsi ka yona. A kere, Ke kgamelo. A kere."	T: "Here it is, here, here, bucket, we fetch water with it, is that so? Bucket, is that so?"	The teacher shows the learners the picture of a bucket on the board.
193 Ls: "Eng?"	Ls: "What?"	
194		Silence while teacher pastes the word Kgamelo and its picture on the board.
195 T: "Ashi wa e bona kgamelo ya ka, a kere? Wa e bona kgamelo ya ka, a kere?"	T: "Here, do you see my bucket, is that so? Do you see my bucket, is that so?"	
196 T: "Byaanong re na le enngwe gape gape, re na le e nngwe gape gape. (...) Re na le enngwe. Yona ke phoofolo. Phoofolo ya teng ba e bitsa kgaka, ke enge?"	T: "Now we have the other one again, again. (...) We have the other one. It is an animal. That animal is called a guineafowl. What is it?"	The teacher checks (looks?) for the word.
197 Ls: " Kgaka."	Ls: "Guineafowl."	
198 T: "Ke enge?"	T: "What is it?"	
199 Ls: "Kgaka."	Ls: "Guineafowl."	
200 T: "Good, Ke kgaka, le a e itse kgaka yona?	T: "Good. It is a guineafowl, do you know the guineafowl?"	
201 Ls: "Yes / no."	Ls: "Yes / no."	

Sepedi	English	Actions / non-verbal
202 T: ”Kgaka e nyakile go tshwana le kgogo.”	T: ”A guineafowl is almost similar to a chicken.”	
203 L: (interrupting the teacher) ”Ba bang ba re no.”	L: (interrupting the teacher) ”Some say no.”	
204 T: ”Kgaka le, ashi yona, ashi yona. O a e bona kgaka?	T: ”Here is the guineafowl. (something missing) – Can you see the guineafowl?)	The teacher goes around showing them the picture of the guineafowl.
205 Ls: ”Yes.”	Ls:”Yes”	
206 T: ”Le a e bona kgaka?	T: ”Can you all see the guineafowl?”	
207 Ls: ”Yes.”	Ls: ”Yes.”	
208 T: ”Le a e bona kgaka ba botlhe?	T: ”Can you all see the guineafowl?	
209 L: ”Yes.”	L: ”Yes.”	
210 T: ”Le a e bona le lena mo morago?”	T: ”Can you at the back also see?”	
211 Ls: ”Yes.”	Ls: ”Yes.”	
212 T: ”Ke mang o itseng kgaka?”	T: ”Who knows the guineafowl?”	
213 Ls: ”Mam, Mam.”	Ls: ”Ma’am, Ma’am.”	
214 T: ”Nkile la e bona kae?”	T: ”Where did you see it?”	
215. Ls: ”Mam, (All nna ke…)”(Unclear)	Ls: ”Ma’am. (All, I….)”(Unclear)	
216 T: ”Shh. Ke kgopela le emise .. le a e bona kgaka.”	T: ”Shh! I am asking you to raise ... can you see the guineafowl?”	
217 Ls: ”Yes, Mam, Mam.”	Ls: ”Yes, Ma’am, Ma’am.”	
218 T: ”Le a e bona ba botlhe kgaka?”	T: ”Can you all see the guineafowl?”	
219 Ls: ”Yes.”	Ls: ”Yes.”	
220 T: ”Ke kgopela o nkemisetse letsogo,o mpotse gore wena o e bone kgaka. M, O bone kae kgaka?”	T: ”I am asking you to raise your hand and tell me where you saw the guineafowl. M, where did you see the guineafowl?”	
221 L: ”Ko dizu.”	L: ’ At the zoo.”	
222 T: ”M a re o e bone ko dizu, o bone kgaka ko dizu, a kere?	T: ”M says he saw it at the zoo. He saw the guineafowl at the zoo, is that so?”	
223 Ls: ”Eng.”	Ls: ”Yes.”	
224 T: ”Fine. Byaanong, nna ke le bontshitse mantswe a ka a kg. A re e bale, a re bale kgogo.”	T: ”Fine. Now, I showed you my words of kg. Let us read, let us read chicken.”	Pointing to word?
225 Ls: ”Kgogo.”	Ls: ”Chicken.”	
226 T: ”Kgamelo.”	T: ”Bucket.”	Pointing to word?
227 Ls: ”Kgamelo.”	Ls: ”Bucket.”	
228 T: ”Kgaka.”	T: ”Guineafowl.”	Pointing to word?

Sepedi	English	Actions / non-verbal
229 Ls: ”Kgaka.”	Ls: ”Guineafowl.”	
230 T: ”Gape, gape, kgogo.”	T: ”Again, again, chicken.”	Pointing to word?
231 Ls: ”Kgogo.”	Ls: ”Chicken.”	
232 T: ”Kgamelo.”	T: ”Bucket.”	Pointing to word?
233 Ls: ”Kgamelo.”	Ls: “Bucket.”	
234 T: ”Kgaka.”	T: ”Guineafowl.”	Pointing to word?
235 Ls: ”Kgaka.”	Ls: “Guineafowl.”	
236 T: ”Wa bona mo ke Kg. ke kg,a kere? E na le o, and then mo ke kga le mo ke kga. Akere le a itse gore ge modumo wa rona ele kg, o tlo tseya a wa tla ka e wa tla ka. e tlo re kga, kge, kgi, kgo, kgu. O re enge?”	T: “You see, here is kg, is that so? It is kg which has an o, and then here is kga and here also is kga. As you know that when the sound is kg, it will combine with “a” and “e” and it will be kga, kge, kgi, kgo, kgu. What will it be?”	
237 Ls: ”Kga, kge, kgi, kgo, kgu.”	Ls: ”Kga, kge, kgi, kgo, kgu.”	
238 T: ”A kere and then geo e fetsa o be o etsa mantswe a le a rona a le. Jaanong ge re lebelletse mo (...) ge re lebelletse gona mo, go na le modumo wa kg mo.”	T: ”As you know when you finish you will then build our sentences. Now as we are looking here (...), when we are looking here, there is a sound of kg here. Can you see it?”	The teacher points at the song on the board.
239 Ls: ”Yes.”	Ls: ”Yes”	
240 T: ”Le a o bona?	T: ”Can you see it?”	
241 Ls: ”Eng.”	L: ”Yes.”	
242 T: ”Go na le modumo wa kg mo.”	T: ”Is there a sound of kg here?”	
243 Ls: ”Yes.”	Ls: ”Yes.”	
244 T: ”Le a o bona?”	T: ”Can you see it?”	
245 Ls: ”Yes.”	Ls: ”Yes.”	
246 T: ”Le a o bona?”	T: ”Can you see it?”	
247 Ls: ”Yes.”	Ls: ”Yes.”	
248 T: ”Modumo wa rena wa kg. A re bale, a re bale: Kgomo motswala Ya malome motswala We kgape motswala We kgame motswala E na le maswi motswala.	T: ”Our sound of kg. Let us read, let us read: A cow, cousin Which belongs to uncle, cousin Herd it, cousin Strangle it, cousin It has got milk.	All done with action by the teacher.
249 T: ”Byaanong, good. Ke nyaka gona mo. O mpotse gore	T: ”Now, good. I want just here. Tell me what sound do you hear?	

Sepedi	English	Actions / non-verbal
o utlwa, o utlwa mantswe a ma feng a kg?		
250 L: ”Mam, Mam.”	L: “Ma’am, Ma’am.”	
251 T: ”E! K?”	T: ”Eh! K?”	
252 L: ”Kgomo.”	L: ”Cow.”	
253 T: ”Kgomo, good. Kgomo ke e ngwetse. A mang gape gape?	T: ”Cow, good. Cow is written. Other words again, again?”	
254 Ls: ”Mam, Mam.”	Ls: ”Ma’am, Ma’am.”	
255 T: ”N?”	T: ”N?”	
256 L: ”A kga, kga, kga, kga.”	L: ”Kga, kga, kga, kga.”	
257 T: ”Kga, kga, kga, kga, good, le Kga,kga,kga,kga. A kere? And then a mang gape gape gona mo. A re lebelleng gona mo. P?”	T: ”Kga, kga, kga,kga, good, kga,kga,kga, kga. Is that so? And then another example, again, again, just here. Let us look here. P?”	The teacher points at the word strangle from the song.
258 L: ”Kgame.”	L: ”Strangle.”	
259 T: ”Kgame, good. Kgame.”	T: ”Strangle, good. Strangle.”	
260 L: ”Mam, Mam, Mam.”	L: ”Ma’am, Ma’am, Ma’am.”	
261 T: ”Ok, ok. Kgame o e kgame motswala. Ba re oe etseng gape gape?”	T: ”Ok, ok. Strangle, strangle it cousin. They say what you should do to it again, again.”	
262 Ls: ”Mam, Mam.”	L: ”Ma’am, Ma’am.”	
263 T: ”Pepe.”	T: ”Pepe.”	
264 L: ”Kgape.”	L: ”Herd.”	
265 T: ”O e, o e.”	T: ”You do, you do.”	
266 Ls: ”Mam, Mam.”	Ls: ”Ma’am, Ma’am.”	
267 T: ” Emella, oe kgape, good. P e bile o a etsa, a re oe kgape, o e kgape. Fine. Ke a le a tswang mo kae? Mo kosheng ya rena. A kere?	T: ”Herd, good. P even did it and said herd it, herd it. Fine. Those are the ones that come from where? From our song. Is that so?	
268 L: ”Yes.”	L: ”Yes.”	
269 T: ”Fine. Byaanong ashi kgape, ashi wa e bona yona, kgape ashi yona, kgape o e kgape motswala, ashi yona, wa e bona a kere?	T: ”Fine. Now, here is herd. This is herd, do you see it? Here is herd, herd and then herd it cousin. Here it is, do you see it, is that so?	The teacher points at the word herd from the song.
270 L: ”Yes.”	L: ”Yes.”	
271 T: ”Ke modumo wa enge? Wa kg a kere, and thene o e kgape motswala, a shi yona, wa e bona?”	T: ”Which sound is it? Of kg, is that so? And then herd it cousin, here it is, do you see it?”	Same.
272 L: ”Yes.”	L: ”Yes.”	

Sepedi	English	Actions / non-verbal
273 T: ”Ke mantswe a rena a enge? A kga and thene re na le eng? Le kgomo akere?	T: ”What type of our words are they? Of kg, and then what else have we got? We have cow, is that so?	
274 L: ”Yes.”	L: ”Yes.”	
275 T: ”Jaanong ke tlo kgopela gore wena o nketsetse mantswe a gao. Ke tlo kgopela mantswe a wena o a itseng a kg. Mantswe a wena o a itseng a kg, le sefane sa ko getsho sa K se thoma ka kga.”	T: ”Now, I am going to ask you to give me your own words. I am going to ask you for the kg words that you know. The kg words that you know, even my family surname of K start with a kga.”	
276 L: ”Mam, Mam, Mam.”	L: ”Ma’am, Ma’am, Ma’am.”	
277 T: ”T?”	T: ”T?”	
278 L: ”Garafo.”	L: ”Spade.” (With equivalent direct from English.)	
279 Ls: ”g, g.”	Ls: ”g, g.”	
280 T: ”E reng? A re utlwelleng.”	T: ”What is it? Let us listen.”	
281 Ls: ”Ke garafo.”	Ls: ”It is the spade.”	
282 T: ”Ke g a kere? Ga se yona T. Garafo ga e na kg akere. Ke garafo, a ke e bitse, utlwella garafo. O mong gape. L?”	T: ”It is g is that so? Is it not the right one, T? A spade does not have a kg, is that so? It is a spade, let me say it, listen, spade. The other one. L?”	
283 L: ”Kgakala.”	L: ”Far.”	
284 T: ”Kgakala, good, kgakala. (...) Kgakala, kgakala ke kae?”	T: ”Far, good, far. (...) Far, where is far?”	Teacher writes the word on the board.
285 Ls: ”Ko kgole.”	L: ”It is far.”	
286 T: ”Ke kgole, kgakala. O mong gape?	T: ”It is far, far. The other one?	
287 Ls: ”Mam, Mam.”	Ls: ”Ma’am, Ma’am.”	
288 T: ”M.”	T: ”M.”	
289 L: ”Kgona.” 290 T: ”Enge?”	L: ”Corner.” (Direct from English) T: ”What?”	
291 L: ”Kgona.”	L: ”Corner.”	
292: ”Kgona ke enge?”	T: ”Corner, what is it?”	
293 Ls:”A re go kgona.”	Ls: ”He says to corner.”	
294 T: ”Corner.”	T: ”Corner.”	
295. Ls: ”Yes.”	Ls: ”Yes.”	
296 T: ”Go corner ke lebitso la Englishi. Jaanong gare, gare le berekisi ka mo Sepeding, akere?	T: ”To corner is an English word. Now we do not, do not use it in Sepedi, is that so?”	
297 Ls: ”Yes.”	Ls: ”Yes.”	

Sepedi	English	Actions / non-verbal
298 T: ”E, K?”	T: ”Eh, K?”	
299 L: ”Kgala, kgala.”	Ls: ”Colour, colour.” (Direct from English.)	
300 T: ”Colour, colour? Ke Englishi ga re le chenchetse ko Sepeding. Akere? N.”	T: ”Colour, colour? It is English; we do not change it to Sepedi, is that so? N.”	
301 L: ”K.”	L: ”K.” ??	
302 T: ”K, le a le utlwa, e renge?	T: ”K ??, do you understand, what does it say?”	Teacher writes the word on the board.
303 L: ”K.”	L: ”K??.”	
304 T: ”K. Le leng gape?	T: ”K??. The other one again?”	
305 Ls: ”Mam, Mam, Mam.”	Ls: ”Ma’am, Ma’am, Ma’am.”	
306 T: ”Le leng gape.”	T: ”The other one again.”	
307 Ls: ”Mam, Mam.”	Ls:” Ma’am, Ma’am.”	
308 T: ”Go na le le leng so. Lentswe la teng, waitse o kereye ba, ba tlisa mabolomo. Ba e beya mo godimo ga ditafola. Ba etsang? Ge re beya mabolomo re baya le dipoleiti tse pila. Re beya le dijo, re etsang?”	T:”There is onother one so. That word, you know you find them bringing flowers. They put it on top of the tables. What do they do? When we put flowers we also put beautiful plates. We also put food, what do we do?	
309 Ls: ”Mam, Mam.”	Ls: ”Ma’am, Ma’am.”	
310 T: ”Re lokisa tente.”	T: ”We prepare the tent.”	
311 Ls: ”Mam, Mam.”	Ls: ”Ma’am, Ma’am.”	
312 T: ”Tente.”	T: ”A tent.”	
313 Ls: ”Kgabisha.”	Ls: ”To decorate.”	
314 T: ”Kgabisha, good. Ke eng?”	T: ”Decorate, good. What is it?”	
315 Ls: ”Kgabisha.”	Ls: ”Decorate.”	
316 T: ”Ke kgabisha. Le leng gape?”	T:”It is to decorate, and what else?”	
317 Ls: ”Mam, Mam, Mam, Mam …….(unclear).”	Ls: ”Ma’am, Ma’am, Ma’am, Ma’am …….(unclear).”	The teacher shows them how to “pull” something.
318 T: ”Enge?”	T: ”What?”	
319 Ls: ”Kgoga.”	Ls: ”Smoke”.	
320 T: ”Utlwa, a se, a se, a re utlwelle, emella o ba botse.”	T: ”Listen, is it, is it, let us listen. Stand up and tell them.”	
321 L: ”Kgoga.”	L: ”Smoke.”	
322 T: ”Kgoga ke enge?”	T: ”Smoke? What is it?”	
323 L: ”Go kgoga motho.”	L: ”To pull a person.”	

Sepedi	English	Actions / non-verbal
324 T: ”Go kgoga, go,go tsuba?”	T: ”To smoke, to, to smoke?”	The teacher writes the word smoke on the board.
325 Ls: ”Go kgoga.”	L: ”To pull.”	
326 T: ”Go kgoga, ga se kgoga, ke goga. Ke enge?”	T: ”To pull, it is not to pull, it is to pull. What is it?	
327 Ls: ”Goga.”	Ls: ”Pull.”	Learner stands up.
328 T:”Ge re goga motho so,ge re mo phula so, re mo goga. Ke goga ne! Ga se kgoga. Re na le kgoga ya go goga enge?”	T: ”When we pull like this, when we pull him like this, we pull him. It is smoke ne! Not pull. We have pull meaning what?”	She shows them how to pull something.
329 Ls: ”Kwae.”	Ls: ”Cigarette.”	
330 T: ”Ya go kgoga enge?”	T: ”Of smoking what?”	
331 Ls: ”Kwae.”	Ls: ”Cigarette.”	
332 T: ”Ke kgoga.”	T: ”To smoke.”	
333 Ls: ”Mam, Mam.”	Ls: ”Ma’am, Ma’am.”	She writes the word smoke on the board.
334 T: “And then e nngwe gape?”	T: ”And then another one again?”	
335 Ls: ”Mam, Mam.”	Ls: ”Ma’am, Ma’am.”	
336 T: “B.”	T: ”B.”	
337 L: ”Kgoma.”	L: ”Touch.”	
338 T: ”Kgoma, good, o a mo kgoma. Akere, good, fine ok. A re lebelleng, a re lebelleng mo mantsweng a rena a mararo a. A kere mantswe a rena a mararo a, kana re rike ke eng le?”	T: “Touch, good, he is touching her. Is that so? Good, fine, ok. Let us look, let us look at our three sentences. By the way our three sentences, by the way what did I say what was it?”	
339 Ls: ”Kgogo.”	Ls: ”Chicken.”	
340 T: ”And then le?”	T: ”And then?“	
341 Ls: ”Kgogo, kgamelo.”	Ls: ”Chicken, bucket.”	
342 T: ”He e.”	T: ”No, no.”	
343 Ls: ”Kgamelo.”	Ls: ”Bucket.”	
344 T: ”Ke enge?”	T: ”What is it?”	
345 Ls: ”Kgamelo.”	Ls: ”Bucket.”	
346 T: ”And then e?”	T:”And then what?”	
347 Ls: ”Kgaka.”	Ls: ”Guineafowl.”	
348 T: ”Ke enge.”	T: ”What is it?”	

Sepedi	English	Actions / non-verbal
349 Ls: ”Kgaka.”	Ls: ”Guineafowl.”	
350 T: ”Ga le bale, a re baleng gape, gape. Ke eng e?”	T: “You do not read, let us read again, again. What is it?”	
351 Ls: ”Kgogo, kgamelo, kgaka.”	Ls: ”Chicken, bucket, guineafowl.”	
352 T: ”Kgaka …..(unclear). Jaanong ke nyaka re etse mafoko, a kere. Ro dira mafoko ka mantswe a rena a mararo a. A re etse mafoko ka mantswe a rona a mararo a.”	T: ”Guineafowl …….(unclear). Now I want us to build sentences. We are going to build sentences with our three words. Let us build sentences with our three words.”	
353 Ls: ”Mam, Mam.”	Ls: “Ma’am, Ma’am.”	
354 T: ”Mafoko.”	T: ”Sentences.”	
355 Ls: ”Mam, Mam.”	Ls: ”Ma’am, Ma’am.”	
356 T: ”Mafoko ka mantswe a rona a mararo a le, P.”	T: ”….zzz sentences with our three words, P.”	
357 L: ”Kgogo e a chaba.”	L: ”The chicken is running away.”	
358 T: ”Kgogo e a chaba. Good P, good P. O mong gape gape.”	T: ”Chicken is running away. Good, P, good P. The other one again, again.”	
359 Ls: ”Mam, Mam, Mam.”	Ls: ”Ma’am, Ma’am, Ma’am.”	
360 T: ”M?”	T: ”M?”	
361 L: ”Kgogo e a ja.”	L: ”The chicken is eating.”	
362 T: ”Kgogo e a ja.”	T: ”The chicken is eating.”	
363 Ls: ”Mam, Mam.”	Ls: ”Ma’am, Ma’am.”	
364 T: ”E ja enge kgogo?”	T: “What is the chicken eating?”	
365 Ls: ”Dijo.”	Ls: “Food.”	
366 T: ”Kgogo e ja dijo.”	T: “The chicken is eating food.”	
367 Ls: ”Mam, Mam, Mam.”	Ls: ”Ma’am, Ma’am, Ma’am.”	
368 T: ”Good, utlwella he, a kere re editse ka kgogo. A re etse ka kgamelo.”	T: ”Good, just listen. We did information about the chicken, is that so? Let us do information using the bucket.”	The teacher shows the word on the board.
369 Ls: ”Mam, Mam, Mam.”	Ls: ”Ma’am, Ma’am, Ma’am.”	
370 T: ”A.”	T: “A.”	
371 L: ”Bakete e a fofa.”	L: ”The bucket is flying.”	
372 Ls: ”A a, bakete?”	Ls: ”Ah, ah, bucket?”	
373 T: ”Ga re na bakete, re na le eng ngwanaka?”	T: ”We do not have a bucket, what have we got my child?”	
374 Ls: ”Ijoo?”	Ls: ”Uhh?”	
375 T: ”He e, he e, re se ke ra mo omanya, a re mmontsheng. Re na le enge?	T: ”No, no, we must not shout at him, let us show her. What have we got?”	

Sepedi	English	Actions / non-verbal
376 T & Ls: ”Kgamelo.”	T & Ls: ”Bucket.”	
377 T: ”A reye, bolela lefoko la gago.”	T: ”Come on say your word.”	
378 L: ”Kgamelo.”	L: ”Bucket.”	
379 T: ”E etsang?”	T: ”What does it do?”	
380 L: ”E a fofa.”	L: ”It is flying.”	
381 T: ”Kgamelo e a fofa. A re lebelleng … (unclear) kana o la o lle kgogo e a ja, a kere? Kgogo e, wa bona gore ke beya monwana for spacing. Ka beya monwana a ja, a kere. A kere o mpone ke beile monwana, akere ga ka di pitlagantsha mo go wane, akere. B?”	T: ”The bucket is flying. Let us look at … (unclear). By the way that one said the chicken is flying, is that so? The chicken is, do you see where I place my fingers? I put my fingers at is eating, is that so? You saw me placing my finger, is that so? I do not put them all in one place, is that so? B?”	The teacher is writing the sentence on the board.
382 L: ”… (unclear) o tshwere bakete.”	L: ”… (unclear) he has a bucket.”	
383 T: ”Ke rile ga se bakete.”	T: ”I said it is not a bucket.”	
384 Ls: ”Mam, Mam, Mam, Kgamelo.”	Ls: ”Ma’am, Ma’am, Ma’am, bucket.”	
385 T: ”Kgamelo. A re mma o tshwere kgamelo. A re bolele.”	T: ”Bucket. She says mother is holding a bucket. Let us talk.”	
386 Ls: ”Mma o tshwere kgamelo.”	Ls: ”Mother is holding a bucket.”	
387 T: ”M, ka kgaka, a reye re etse lefoko ka kgaka, o ne o batla go etsa ka kgamelo, etsa ka kgamelo, ngwanaka, emella.”	T: ”M, with guineafowl, let us build a sentence with guineafowl. Did you want to use bucket, use bucket my child, stand up.”	
388 L: ”Mma o kga metsi ka kgamelo.”	L: ”Mother is fetching water with the bucket.”	
389 T: ”Good, mma o kga metsi ka kgamelo. O utlwile di kga tsa mathomo gore ke tse kae. Tse pedi: Mma o kga metsi ka kgamelo. Good. Mma, mma o, wa mpona akere, kga metsi ka kgamelo. (...) Wa e bona kga? Wa e bona kga? A kere?	T: ”Good, Mother is fetching water with the bucket. Did you hear the first sounds of kga how many they are? They are two: Mother is fetching water with the bucket. Good. Mother, mother is, you see me, is that so, fetching water with the bucket. (...) Do you see kga? Do you see kga? Is that so?	Teacher writes the sentence on the board.
390 Ls: ”Yes.”	Ls: ”Yes.”	
391 T: “A re lebelle byaanong kgaka. A re etseng lentswe ka kgaka. Lefoko la rona ka kgaka.”	T: ”Let us now look at guineafowl. Let us build the sentence with guineafowl. Our word guineafowl.”	
392 Ls: ”Mam, Mam, Mam.”	Ls: ”Ma’am, Ma’am, Ma’am.”	
393 T: ”S.”	T: ”S.”	
394 L: “…(unclear)”	L: ”… (unclear)”	
395 T: ”Mma o bolela o … (unclear) menwana, ga ke go utlwe.”	T: ”Mother you are talking while … (unclear) fingers. I do not hear you.”	
396 Ls: ”Mam, Mam.”	Ls: ”Ma’am, Ma’am.”	

Sepedi	English	Actions / non-verbal
397 T: ”Bolela. Emella o bolele.”	T: ”Talk. Stand up and talk.”	
398 L: ”Kgaka e a tsamaya.”	L: ”The guineafowl is walking.”	
399 T: ”Kgaka e a tsamaya.”	T: ”The guineafowl is walking.”	
400 Ls: ”Mam, Mam, Mam.	Ls: ”M’aam, Ma’am, Ma’am.”	
401 T: ”He e, ke lona, ke lona, ke lefoko, o a bolela a re: Kgaka e, mara ga re re tsamaya ka Sepedi, re re enge?”	T: ”No, no, it is the right one. It is the word. He is talking and he said; guineafowl is, but we do not say walking (tsamaya) in Sepedi, What do we say?”	
402 Ls: ”Sepela.”	Ls: ”Walking.”	
403 T: ”Sepela, good, M?”	T: ”Walking, good, M?”	
404 L: ”… (silence)”	L: ”… (silence)”	
405 T: ”M, kgaka.”	T: ”M, guineafowl.”	
406 L: ”... (silence)”	L: … (silence)”	
407 T: ”B.”	T: ”B.”	
408 L: ”Kgaka … … (unclear).”	L: ”Guineafowl … … (unclear).”	
409 T: ”Kgaka e a chaba. Good. O mong gape?”	T: ”The guineafowl is running away. Good. Another one?”	The teacher writes the sentence on the board.
410 Ls: ”Mam, Mam, Mam.”	Ls: ”Ma’am, Ma’am, Ma’am.”	
411: ”Kgaka e a fofa.”	L: ”The guineafowl is flying.”	
412 T: ”Kgaka e a fofa. E a fofa vela kgaka.”	T: ”The guineafowl is running (flying?). Truly flying is the guineafowl.”	
413 Ls: ”Yes.”	Ls: “Yes.”	
414 T: ”Kgaka e a fofa. A reye o mong gape, gape. Ke nyaka, ke nyaka lefoko le e leng gore ke tla, ke tla, ke tla, ke tla le utlwa waitse ke eng, le tsena mo mading. M.”	T: ”Guineafowl is flying. Let the other one try again, again. I want, I want a word which I will, I will, I will, I will feel you know what it is, penetrating my blood. M.”	
415 L: ”… … … (unclear).”	L: ”… ... ... (unclear).”	
416 T: ”He? Ke nyaka lefoko ka kgaka. E re ke lefe lona. Kgaka e swana le kgogo. A re bolele.”	T: ”What? I want a sentence with guineafowl. Let me give you the sentence: The guineafowl looks like the chicken. Let us say it.”	
417 T & Ls: ”Kgaka e swana le kgogo.”	T & Ls: ”The guineafowl looks like the chicken.”	
418 T: ”A kere, ga di tshwane?”	T: ”Is that so, don’t they look alike?”	
419 Ls: ”Di a tshwana.”	Ls: ”They look alike.”	
420 T: ”Di a tshwana. Kgaka e swana, e swana le kgogo.”	T: ”They look alike. The guineafowl looks, looks like the chicken.”	The teacher writes the sentence on the board.
421 T: ”A re baleng mafoko a a rena: Kgogo e a ja.”	T: ”Let us read our sentences: The chicken is eating.”	

Sepedi	English	Actions / non-verbal
422 Ls: ”Kgogo e a ja.”	Ls: ”The chicken is eating.”	Writing (reading?) the sentence on (from?) the board.
423 T: ”S, lebella mo pele. Kgogo e a ja.”	T: ”S, face the front. The chicken is eating.”	
424 Ls: ”Kgogo e a ja.”	Ls: ”The chicken is eating.”	
425 T: ”Mma o kga metsi ka kgamelo.”	T: ”Mother is fetching water with the bucket.”	
426 Ls: ”Mma o kga metsi ka kgamelo.”	Ls: ”Mother is fetching water with the bucket.”	
427 T: ”Mma o kga metsi ka kgamelo.”	T: ”Mother is fetching water with the bucket.”	
428 Ls: ”Mma o kga metsi ka kgamelo”	Ls: ”Mother is fetching water with the bucket.”	
429 T: ”Kgaka e swana le kgogo.”	T: ”The guineafowl looks like the chicken.”	
430 Ls: ”Kgaka e swana le kgogo.”	Ls: ”The guineafowl looks like the chicken.”	
431 T: ”Good. A re baleng mantswe a le a rena a le mphileng ona le nna ka tla le a mang: Kgomo.”	T: ”Let us read the words that you mentioned and those that I gave you: Cow.”	Tapping ruler on the board on the word, and those following.
432 Ls: ”Kgomo.”	Ls: ”Cow.”	
433 T: ”Kgama.”	T: ”Strangle.”	
434 Ls: ”Kgama.”	Ls: ”Strangle.”	
435 T: ”Kgape.”	T: “Herd.”	
436 Ls: ”Kgape.”	Ls: ”Herd.”	
437 T: ”Kgakala.”	T: ”Far.”	
438 Ls: ”Kgakala.”	Ls: ”Far.”	
439 T: ”Kgothatso.”	T: ”Console.”	
440 Ls: ”Kgothatso.”	Ls: ”Console.”	
441 T: ”Kgabisha.”	T: ”Decorate.”	
442 Ls:”Kgabisha.”	Ls: ”Decorate.”	
443 T: ”Kgoga.”	T: ”Smoke.”	
444 Ls: ”Kgoga.”	Ls: ”Smoke.”	
445 T: ”Kgoma.”	T: ”Touch.”	
446 Ls: ”Kgoma.”	Ls: ”Touch.”	
447 T: ”Fine, a re baleng, re badile eng, re ithutile ka modumo wa kg, a kere. Gore modumo wa rona wa kg ke e mentshi e bile re file, le mphile le, le mantswe, e be la mpha le eng, le? Mafoko a kere. Fine. Byaanong …”	T: ”Fine, let us read, what did we read, we learned about the sound kg, is that so? That there are a number of the kg sounds, we also provided me with the sentences. What else did you say, and? Sentences, is that so? Fine. Now ...”	There is silence/break while the teacher is searching for some papers on her desk.

Sepedi	English	Actions / non-verbal
		26:24 – 26:34
448 T: ”Ke tlo lefa moshomo, a kere?” 26:34 → (- 31:54)	T: ”I am going to give you work, is that so?”	The teacher points to the group.
449 Ls: ”Yes.”	Ls: ”Yes.”	
450 T: ”Ke tlo lefa moshomo. Le a itse re bereka ka digroups, a kere? Ke tlo fa ba ka mo. Group ya ka mo ke kgopela gore o ntshetse glu ya gago. Ntshang glu. Ke tlo o fa. Group ya ka mo e tlo berekisa displit pisi tsela. Ba treiselletsa modumo wa rona wa kg, a kere. Ka mo grupung e, a kere, le nkutlwelleng gore wena o mong le o mong o etsa enge. A kere, a kere le a itse gore ga re etse mmereko wa go tshwana, a kere.”	T: ”I am going to give you work. You know we work with groups, is that so? I am going to give this group. This other group may you please take out your glue. I am going to give you. The other group is going to use those split pieces. They are going to trace the sound of kg, is that so? In this other group, is that so, listen to me to the instructions. Is that so, is that so, you know that we do not do the same work, is that so?”	
451 Ls: ”Yes.”	Ls: ”Yes.”	
452 T: ”A reye ntsha glu.”	T: ”Come on, take out your glue.”	She gives them pieces of paper on which the letters kg are written.
453 L: ”… … … (unclear).”	L: ”… … ... (unclear).”	
454 T: ”O tla mo thusa.”	T: ”You will help her.”	
455 L: ”… … … (unclear).”	L: ”… … ... (unclear).”	
456 T: ”Shh. O mong le o mong o tshwere tsa gage, a kere? Aa, it does not matter. We will look after them. Can I have this one? A reye bereka. O mong le o mong a kere o bereka dilo tsa gage a kere? Ra peista a kere? Ooh, le a phinya lena. (...) A reye, thoma o peiste, thoma o bereke, thoma. Ga re emele motho, a kere? Le a itse a kere gore o e bea byang, a kere? O a bea mo godimo ga, o tsamaisa mo godimo ga letere eo,a kere?” (...)	T: ”Shh. Each and every one have theirs, is that so? Ah, it does not matter. We will look after them. Can I have this one? Come on, work. Each and every one is working with their things, is that so? We paste, is that so? Ooh, you are pasting(?). (...) Come on, start pasting, start working, start. We do not wait for anybody, is that so? You know how to place it, is that so? You place it on top of, you place it on top of the letters provided, is that so?” (...)	The teacher gives learners plates full of beans which are pasted along the letters kg. There is silence while learners are busy pasting.
457 T: ”O mong le o mong o tshwere pleite ya gage, a kere?”	T: ”Each and everyone has his plate, is that so?”	
458 Ls:”Enge.”	Ls: ”Yes.”	
459 T: ”A re ye, a reye, a re berekeng. K, tshwara ya gago.” (...)	T: ”Come on, come on, let us work. K, take yours.” (...)	She gives him a plate full of beans and paper with letters Kg.
460 T: ”O ska etsa speisi ne! (...) And then group ya bobedi,	T: ”Do not make a space, neh! (...) And then the second group,	Learners busy pasting

Sepedi	English	Actions / non-verbal
group ya bobedi, o tlo utlwella a kere, group ya bobedi. Ka mo, ka mo temaneng e, o tlo nyaka modumo wa kg, mo go nang le lentswe la kg. Maybe o ba, tla kere o kereya mo ba ngwetse kgogo ne! O tlo tseya, o tlo tseya pentsele ya gago goba krayone ya gago wa sekels lentswe le, a kere? Wa le sekela mantswe a otlhe a a nang le modumo wa kg. A kere? Wa sekela, o ka nna wa berekisa krayone.”	second group, you will listen, is that so, the second group. In the, in this paragraph, you will search for sound of kg where there is a word with kg. Maybe you will, let me say that they have written chicken neh! You will take, you will take your pencil or your crayon and circle the word, is that so? You circle all words with the sound kg, is that so? You circle, you can use the crayons.”	beans over the kg with the glu.
461 L: ”… … … … (unclear).”	L: ”… … ... ... (unclear).”	
462 T: ”Di a shota. Tshwara. (...) Fine. And then lena, a re ntsheng buka ya rena e, ya moshomo wa, buka ya moshomo, e tala e la, a kere, e green? A re ntsheng buka. A re buleng page 64, page 64. (...)”	T: ”There is not enough.Take. (...) Fine. And then you, let us take out our workbook, our workbook, our workbook, the green one, is that so, the green one? Let us take out the book. Let us open on page 64, page 64. (...)”	The teacher distributes the papers. The learners are taking out their green books.
463 (Silence)	(Silence)	Silence.
464 T: ”Page 64, page 64. G etsa ka pele shi buka ya gago.”	T: ”Page 64, page 64. G make it snappy, here is your book.	
465 L: ”… … … (unclear).”	L: ”… … ... (unclear).”	
466 T: ”O butse page 64?”	T: ”Did you open page 64?”	
467 Ls: ”Yes.”	Ls: ”Yes.”	
468 T: ”M, re tla page 64, ba botlhe re butse page 64, ke ka mo, a kere? Ke ka mo a kere? Modu, modumo wa bona le a bona botlhe?”	T:” M, we are on page 64, we have all opened on page 64, it is in here, is that so? It is here, is that so. Sound, sound you see it all?”	The teacher shows them the work in the book.
469 Ls: ”Yes.”	Ls: ”Yes.”	
470 T: ”Modumo wa kg ne! Le a bona ba botlhe? Le a bona ba botlhe?”	T: ”The sound of kg,neh! Can you all see them? Can you all see them?”	
471 Ls: ”Yes.”	Ls: ”Yes.”	
472 T: ”Modumo wa kg. Bala o be o kopolle mantswe a a latelang, a kere? O kopolla mantswe a otlhe mo, ba thomile ka kgomo ba re kgogo. Wena wa kopolla ka mo molaeneng wa ka mo le ka mo molaeneng wa ka mo. A re yeng. I am through. Nge xhedile.	T: ”The sound of kg. Read and re-write the following words, is that so? You re-write all the words here, they started with cow, and then the chicken.You are re-writing on this line and the other lines. Let us go. I am through. I am through.	
473 32:04 – 32:25		Learners are busy writing the classwork.
474 T: ”Ra bereka. Hu u, go pila byang. A lala, jo jo jo, e he	T: ”We are working. Hu u, it is beautiful. A lala, jo jo jo, ei heh! Let	The teacher is moving

Sepedi	English	Actions / non-verbal
he. A re berekeng.” 32:25 – 34:32	us work.”	about checking how the learners are doing their work.
475 Ls: ”… … … … (unclear).”	Ls: ”… … … ... (unclear).”	
476 T: ”Ra sekela. Re sekela lentswe le lotlhe, ga re sekele le le wane. Ba re dikgomo, thoma mo ne! A reye, raba o sekele ne! Good! R o nyaka enge? Ke boletse ka re … … (unclear), re theogela ko tlase. Lena ba le ngwalang a re lebelleng, a re lebelleng. Go o ngwala k byaka e le melaene e mebedi k e ya ko tlase. Lena ba le ngwalang le mo llaeneng mo e ye ko tlase. Raba o ngwale pila. A shi o phimotse.”	T: ”We circle. We circle all the words, not only one. They say cows, start here neh, come on! Erase and circle! Good! R, what are you looking for? I said that … ... (unclear) we move downwards. Look at me those who are writing. When you write k use two lines and let k be down.Those who are writing on the line, let this part face downwards. Erase and write well. Here it is, you have erased it.”	Same.
477 Ls: ”… … … ... (unclear).”	Ls: ”… … … … (unclear).”	