Language teaching is no panacea: A theoretical perspective and critical evaluation of language in education within the South African context

Heila Jordaan

Department of Speech Pathology and Audiology, School of Human and Community Development, University of the Witwatersrand, Johannesburg

Correspondence to: H Jordaan (heila.jordaan@wits.ac.za)

ABSTRACT

Language competence is both the means and the end to educational achievement, and multilingualism in particular has important cognitive, academic and societal advantages. The linguistic diversity in South Africa creates an ideal context to provide learners with the educational opportunities that promote high levels of linguistic proficiency in their home and additional languages. Unfortunately, the education system has not delivered on the constitutional imperatives of promoting multilingualism. English continues to dominate as the preferred language of teaching and learning, at the expense and marginalisation of the African languages. This is regarded by many researchers as the primary reason for the disturbingly low numeracy and literacy achievement levels of the majority of South African schoolchildren. However, the effects of language-in-education practices on academic achievement are not straightforward. This paper analyses recent research pertaining to the effects of language-in-education practices and argues that the critical role of educational linguistics is neglected in the South African education system. This affects the quality of teaching irrespective of the language of instruction and has a significant impact on the achievement of our children. The purpose of this paper is to present a critical theoretical perspective on language in education in order to influence policy and practice. An additional aim is to promote the role of speech-language therapists (SLTs) in education, since these professionals are well positioned to work in collaboration with educators to enhance language learning in mainstream/ordinary classrooms. However, SLTs also need to be well informed about the challenges in education and the theory underlying language-in-education practices.

Keywords: language-in-education; the role of the SLT

The current South African education system is in crisis and confronted with serious challenges (Fleisch, 2008; Webb, Lafon & Pare, 2010). A number of recent large-scale national and international research projects have unequivocally shown that the majority of South African children have very low literacy and numeracy levels (Department of Education, 2005; Reddy, 2005; Moloi & Strauss, 2005; Taylor & Yu, 2008; Mtshali & Smillie, 2011). Although the problems in education are exacerbated by conditions of poverty and poor teaching quality (Fleisch, 2008; Reddy, Kanjee, Diedericks & Winnaar, 2006), many educational researchers propose that the main reason for the poor performance of South African schoolchildren is that the majority are learning in English as an additional language (Heugh, 2009; Brock-Utne & Skattum, 2009; Alexander, 2005). The term 'additional language' as opposed to 'second language' is used, since many South African children are exposed to more than one language in the home and community in addition to and often before learning English. While it is true that English is dominant in South Africa, both in the public domain and in education, the effects of language-in-education practices are not straightforward. There is a complex interaction of factors causing poor achievement, and research on language-in-education practices has yielded inconsistent results.

The central argument of this paper is that one of the most important reasons for the poor achievement of South African learners is that the pivotal role of language in education is neglected in the curriculum and in teacher-training programmes, resulting in limited language awareness, and consequently inadequate teaching methods that lead to language difficulties across all curriculum areas. This is a problem irrespective of whether English or one of the African languages serves as the medium of instruction, or is the subject of study. This argument is based on a number of theoretical constructs. The first is the distinction between social and academic language (Cummins, 2008), which is not acknowledged in the outcomes-based education (OBE) assessment standards. The development of the academic language register is one of the primary goals of education, since it underlies literacy, mathematics, and meaningful engagement with the subject matter at all stages of education (Scarcella, 2011). It is not acquired as naturally as the social-communicative functions of language and develops through formal

instruction at all stages of the education process (Cummins, 2008; Scarcella, 2011).

The second is social constructivism as a theory of language learning. Although OBE claims to be constructivist (Heugh, 2009), it is essentially positivist in that it focuses on performance and outcomes, and not on the processes essential for language learning (Balfour, 2007; Reagan, 2009).

The third is content and language integrated learning (CLIL) (Coyle, 2008; Sherris, 2008), which is highly effective in contexts where learners are required to master both the subject matter and language of learning, as is the case for the majority of South African children.

Research on children instructed in English as an additional language

In contrast to the generally positive findings on the achievement of African children educated in their home language and/or in bilingual programmes (Heugh, 2009; Obondo, 2008), the language problems experienced by children who are instructed in a second or additional language have been extensively researched both internationally and in South Africa, and a growing number of educational researchers attribute underachievement to learning in a second or additional language (Alexander, 2005; Brock-Utne & Skattum, 2009; Pluddeman, Vuyokazi & Ncedo, 2010, in Webb *et al.*, 2010). These authors suggest that the choice of English by a large proportion of African-language-speaking parents is undermining the academic achievement of the children they are seeking to empower through education. In most research studies there is almost complete agreement that underachievement is linked to instruction and assessment in English. These studies, which all suggest an achievement gap between English first-language (EFL) and additional-language learners (EAL), are discussed below.

Referring to the Third International Mathematics and Science Study (TIMSS) on 900 grade 8 learners, in which South Africa obtained an average score of 264 for mathematics compared with the international average of 467, Howie (2005a) states that fluency in English was the

most significant determinant in learning science and mathematics. Reddy *et al.* (2006) report that in the 2003 TIMSS test, children who 'always' spoke the language of the test at home scored an average of 349, while those who 'never' spoke the language of the test at home scored only 192. The Western Cape grade 6 assessment study (WCED, 2004) showed that children who spoke English as a first language (L1) had a mean score of 70% on the literacy test, while isiXhosa L1 speakers obtained only 37%. Only 1.6% of isiXhosa speakers performed at official grade level.

Broom (2004) investigated the reading achievement of grade 3 learners in 20 urban primary schools in Gauteng, and found that the average score on the reading test for EAL learners in township schools was 31.8%, as opposed to the 87.8% achieved by EFL learners. The performance of EFL learners was consistently higher than that of EAL learners, even in the same urban schools, but the performance of EAL learners in the urban schools was better than that of their peers in the township schools.

A number of studies have also investigated the language proficiency, as opposed to educational outcomes, of children learning in English.

A study by Jooste (2003) on grade 5 children in a number of upper and lower socio-economic status (SES) schools in Cape Town, showed that by grade 5, EAL learners were still performing significantly below their EFL peers on measures of reading comprehension. Van Rooyen and Jordaan (2009) assessed 464 grade 8 - 12 learners in an ex-model-C high school on a measure of complex sentence comprehension. Although the results of the study indicated that the majority of learners achieved within the average range, and there were no statistically significant differences between EFL and EAL learners, the EAL participants tended to score, on average, one scaled score below the EFL participants, suggesting that they had not quite reached the proficiency levels of the first-language participants. This means that despite a substantial period of educational exposure to English throughout the primary and high school grades, parity with monolingual peers is not always achieved, even on oral tasks. One would therefore expect greater differences on reading or written tasks, which demand higher levels of language processing. In addition, the language comprehension scores were positively correlated with the most recent school report mark and the most recent English mark, confirming that oral language proficiency underlies academic achievement (Cummins, 2008).

Webb *et al.* (2010, p. 279) claim that the choice of English as the medium of instruction by learners in the ex-model-C schools is not as problematic as in rural and township schools, because in the former context the learners have 'reasonably adequate' English proficiency. However, this may be an assumption based on the research evidence showing that middle-class children of all races in this system perform as well as those in international contexts on measures of numeracy and literacy and go on to obtain a university entrance exemption and education (Fleisch, 2008).

It should be noted that the research referred to by Fleisch (2008) does not consider the differences between EFL and EAL learners in these schools and some of the reported difficulties, particularly related to language, experienced by teachers and learners in ex-model-C contexts (Du Plessis & Naude, 2003; Du Plessis & Louw, 2008; O'Connor & Geiger, 2009). For example, Meier (2005, p. 171) found that teachers in this context experienced increased workloads in accommodating learners from diverse backgrounds since they had to adapt their teaching methods by teaching at different levels, sometimes 'lowering standards', and they had not been prepared to deal with multilingualism in the classroom. From the EAL learners' perspective, the complexity of the English used by EFL teachers demands high levels of auditory processing and short-term memory and can lead to attention problems (Brice & Brice, 2000). If these children experience academic problems as a result of learning in English, this leads to lowered self-esteem and a lack of confidence (O'Connor & Geiger, 2009). In a study on 80 foundation-phase teachers in ex-model-C schools in the Cape Town

metropolitan area, O'Connor and Geiger (2009) found that teachers expressed difficulties with discipline as a result of comprehension problems in EAL learners, and had limited success in collaborating with parents, because of social circumstances such as extended working hours, transport problems and financial difficulties. Parents' limited English proficiency and low literacy levels were also identified as problems since they could not assist with homework. Teachers found it difficult to teach at different linguistic levels when they had both EAL and EFL children in their classes, and experienced time pressures when they had to pre-teach the vocabulary and concepts required in a particular lesson. EFL teachers were frustrated by not being able to speak the home languages of the children in their classes and did not always understand the influence of the home language on the learning of English. Teachers expressed a need for support such as assistants who speak African languages, language-enrichment teachers, and language-teaching resources. They also felt that their training was not adequate in either multilingualism or teaching practice to equip them for the task of educating learners from diverse linguistic backgrounds. It is therefore apparent that one cannot assume that EAL learners in ex-model-C schools are necessarily achieving the English proficiency they need to perform to their full potential academically.

Furthermore it has become evident in studies of university students (Pienaar, 2009) that language problems are perpetuated at this level, and there is growing concern among academics that many students, regardless of educational background and whether they are L1 or second-language (L2) speakers of the language of instruction at the university, enter the tertiary level with weak language and literacy skills and are ill-equipped to deal with the demands of academic language in the various disciplines. This is particularly reflected in their writing skills. Questions can therefore be raised regarding the language-learning processes in all schools and whether children attain the language proficiency and consequent literacy skills required for the increasing conceptual demands of the curriculum in the higher grades and beyond.

Fleisch (2008, p. 98) points out that although the research shows a relationship between achievement and instruction in English, the studies often do not provide insights into the 'generative mechanisms, the underlying reasons or causes that link children's experiences with language at school and their failure to become proficient in reading and mathematics', i.e. exactly how language proficiency is linked to academic achievement.

Particularly in rural and township schools that adopt a transitional or 'English from grade 1' model, the generative mechanisms are considered to be as follows: a lack of sufficient academic language development in the L1, making the leap from learning the language in the first 3 grades to using it for learning in grade 4 too steep (Heugh, 2009); teachers' inevitable use of code switching, which arguably builds neither the L1 nor L2 (Holmarscott, 2003); and the focus on lower-order cognitive tasks as a way of compensating for lack of mastery of the medium of instruction (Fleisch, 2008). Another proposed mechanism involves the emotions of L2 teaching and learning. Probyn (2001) showed that teachers in township schools found teaching in English to be stressful and felt that the learners were equally affected by the demands of learning in English, in that they often understood what they were learning but could not express themselves, leading to embarrassment and a loss of self-esteem.

However, although these factors are important, they are not necessarily the real 'generative mechanisms', as Fleisch (2008, p. 98) suggests. An analysis of the actual language teaching and learning mechanisms on a psycholinguistic level is more likely to reveal what it is that teachers are teaching and learners are learning about language that may or may not support their academic development. A recent study by Meirim, Jordaan, Kallenbach and Rijhumal (2010), for example, examined the development of semantic processing skills such as fast mapping and lexical organisation in a longitudinal study of grade 1 - 3 EAL learners, and suggest that these skills need to be developed at this stage of the education process in order to enhance the learners' vocabulary acquisition.

Alternative interpretations of the research on language effects in academic achievement

Fleisch (2008) points out that although the evidence for language as a major factor contributing to the poor performance of South African children is convincing, the interpretation of these findings needs to be carefully evaluated. He bases this argument on a study by Braam (2004), Howie's (2005b) detailed analysis of the TIMMS studies, and a re-appraisal of Heugh's (2000; 2006; 2009) arguments, which are based on earlier research by Malherbe (1977).

Braam (2004) found that in a dual-medium English-Afrikaans school on the Cape Flats, serving a mixed community of lower-middle-class and working-class coloured families, 55% of the children registered in the English stream despite reporting that Afrikaans was their home language. Across the curriculum, these children were more successful academically than the Afrikaans-speaking children enrolled in the Afrikaans stream. Braam (2004) explains this as reflecting a complex set of class dynamics. In this specific community, Afrikaans is stigmatised as the language of the lower class and the teaching practices are aligned to this stigmatisation, with the Afrikaans classes subjected to more direct, transmission teaching while the teachers in the English stream, who are also EFL speakers, associate English with academic achievement and encourage higher-order thinking. The implication is therefore that home language instruction 'does not exist in a social and political vacuum', and teaching in the home language does not necessarily lead to better outcomes (Fleisch, 2008, p. 112).

Howie's (2005b) analysis of the TIMMS results showed that there are other countries where a large proportion of children (more than 70%) did not speak the language of the test at home (e.g. Indonesia, Malaysia, Morocco, Philippines and Singapore). In both Indonesia and Malaysia, a significant proportion of these children did better than children who 'always' or 'sometimes' spoke the language of the test at home. In Singapore, 'seldom' or 'never' speaking the language of the test at home did not preclude academic excellence. These findings apply not only to East Asia but also to countries in North Africa, and while the difference on the average mathematics score between children who 'always' and 'never' spoke the language of the test at home was 157 points in South Africa, it was only 46 points in Botswana. Taken together, these results suggest that language factors are not the only contributors to educational achievement.

Fleisch (2008) argues that Heugh and co-workers, who are advocates of home language instruction in the context of an additive bilingual approach, frequently cite the work of Malherbe (1977) on Afrikaans-English bilingual schools, showing that children who had Afrikaans home language instruction up to grade 7, followed by dual-medium instruction in Afrikaans-English from grades 8 - 12, performed better in both languages than children in monolingual Afrikaans or English schools. They also showed higher levels of tolerance for linguistic diversity, and even learning-disabled children performed better. In addition, the dual-medium schools were mostly in rural and less well-resourced areas. Heugh (2000) interprets this research as indicating that the African languages should be used as media of instruction for as long as possible, while English is taught as a subject. However, according to Fleisch (2008), these findings offer evidence against the 'home language is best' position. He cites Malherbe's conclusion that although learning in the L2 results in an initial disadvantage in content subjects, the medium of instruction is less significant as the child progresses to higher grades and eventually has no impact on achievement. Malherbe (1977) actually found that the language performance of Afrikaans-speaking children in English-medium schools was better than for Afrikaans-speaking children in Afrikaans schools in the higher grades. It is ironic that Fleisch (1995) himself criticised Malherbe's groundbreaking work for its link to a particular political agenda, when in fact it showed the importance and advantage of maintaining both languages, either through using them as the medium of instruction or teaching them as subjects, since the majority of schools in Malherbe's (1977) research were either parallel- or dual-medium. This meant that even if the children were being educated in the L2 (English), they

still received input in the L1 (Afrikaans) at an academic level through subject teaching, and there was continued use of Afrikaans in the home environment. Of course, comparisons between Afrikaans and the African languages as media of instruction should be treated with caution, since the apartheid government invested significant amounts of money in the development of Afrikaans, and textbooks, dictionaries, fiction, etc. were readily available. Afrikaans also enjoyed high status and was used extensively in the public domain. The support for the home language under these learning conditions makes a difference.

The results of a study by Morrow, Jordaan and Fridjhon (2005) contribute some insight into the perceived advantages of bilingual and home language instruction. In this study 181 grade 7 learners from three different contexts (rural, urban and township), where the language-of-instruction practices varied, were tested on an assessment tool constructed in English and translated into isiZulu. The assessment tasks were based on the frequency of occurrence of key concepts in a published curriculum package. The learners showed specific patterns of performance dependent on context. The learners in urban ex-model-C schools (taught only in English) performed significantly better in English (89.5%) than in isiZulu (58.1%), demonstrating the highest level of competence in English but the lowest in isiZulu. Learners in townships schools (taught in both English and isiZulu) showed similar proficiency in both languages, demonstrating the same level of competence in isiZulu (71.43%) and English (73.5%) but significantly higher English scores than the learners in rural schools (taught in both English and isiZulu), who did much better in isiZulu (75.1%) than in English (53.4%). The study showed that children in the urban schools who were instructed only in English did very well and better than the children in township and rural schools in either English or isiZulu, thus contradicting the claim that bilingual education is preferable to monolingual education, and that performance in the L2 is dependent on L1 proficiency, especially since the urban learners obtained a relatively low average score on the isiZulu test (58.1%). The children in the township schools demonstrated a balanced profile, but did not do as well in English as their urban counterparts, although they may have caught up at a later stage and would have the advantage of being proficient in both English and isiZulu on an academic level. Despite receiving instruction in English from grade 4 onwards, the children in the rural schools showed that they were not coping with this medium of instruction and would be far better off if isiZulu were used as the language of teaching and learning. The findings of this study thus confirm the strong contextual influences on language in education, and reinforce the conclusion that the role of language in poor school performance is not clear-cut.

Fleisch (2008) therefore poses the question: Do children fail because they do not understand the language of learning and assessment, because of poverty-related issues or because they attend inadequate schools? In all likelihood the answer is an interaction and combination of all these factors, but it is nevertheless important to address the issue of quality, since it is highly variable in different contexts and is considered to be 'the fundamental problem in South African education ...' (Fleisch, 2008, p.121).

Quality of education and language teaching practices

In rural and township schools, the quality of education is affected by five main factors: many teachers are not literate and have poor subject knowledge; the children receive less instructional time because of poor punctuality, absenteeism and preoccupation with other tasks; teachers have low expectations of children; there is poor utilisation of existing materials; and inadequate methods of instruction are used (Fleisch, 2008).

Once again, the extent to which these factors affect urban schools has not been widely researched, but there is some evidence to suggest that there are problems in this system as well. For example, Van der Sandt and Niewoudt (2003) found that grade 7 and prospective student teachers in ex-model-C schools had weak knowledge of geometry.

Also, in contrast to other countries where teacher expectations are low for certain children, South African teachers are said to have low expectations for all children because of misinterpretation of the grade level requirements of the official curriculum standards and misunderstanding of child-centred pedagogy (Vinjefold, 2004, in Fleisch, 2008). This results in lower teaching standards and in children becoming complacent about what they know.

In particular, and of relevance to this paper, is South African teachers' knowledge of language and knowledge about language, collectively referred to as 'teacher language awareness' (Andrews, 2003, p. 81), which directly affects their teaching practices. Andrews (2003, p. 84) defines language-teaching practices as the 'creation of opportunities for language learning in the classroom.' Language-teaching goals and methods may be planned in advance, but the teacher also needs to be flexible and adapt to the discourse demands created by the classroom interaction (Wright & Bolitho, 1997). According to Andrews (2003, p. 86) teachers' language awareness is 'metacognitive', involving the ability to reflect on knowledge of and about language, and this distinguishes the teacher from the learner. This metacognitive dimension of language teaching is central to educational linguistics (Brumfit, 1997; Reagan, 2009).

However, in the international literature as well as in South African research there is evidence to suggest that language in education is a 'tricky business' (Reagan, 2009, p. vii). Educational linguistics is a specialised area that has unfortunately been neglected in teacher-training programmes, and consequently few teachers have sufficient knowledge of the complex, multidimensional nature of language and the implications for language-learning and language-teaching processes in either L1 or L2 contexts (Uys, Van der Walt, Van den Berg & Botha, 2007; O'Connor & Geiger, 2009; Mroz, 2006; Wong-Fillmore & Snow, 2000; Andrews, 2003).

One of the central issues in educational linguistics is the notion of academic language (Wong-Fillmore & Snow, 2000; Cummins, 2008).

Academic language

A recurring theme in the literature on school-age language is the distinction between social and academic uses of language (Bailey, 2006; Cazden, 2001; Chamot, 2005). Saville-Troike (1984, p. 216) introduced the term 'academic competence' to refer to the 'qualitative difference between the communicative tactics and skills that children find effective for meeting their social needs and goals and those that are necessary for academic achievement in the classroom'. A number of theorists have proposed that the language used in the academic context is qualitatively different from that used in everyday conversational contexts (e.g. Bruner's (1975) communicative and analytic competence, Donaldson's (1978) embedded and disembedded language, Olson's (1977) utterance and text, Gibbons' (1991) playground and classroom language and Gee's (1990) primary and secondary discourses), but a precise description of academic language is elusive (Wong-Fillmore & Snow, 2000) and is dependent on the particular focus of different professional or research communities (Valdes, 2004).

Although the concept of a distinct academic language register can be applied to any language used for teaching and learning, which is an important consideration in the South African context, most of the work in this area has focused on English. For those working with individuals whose L1 is English, academic language refers to literature, writing, language arts, and proficiency in oral and written text, also known as 'academic discourse' (Valdes, 2004, p. 108). For those working with individuals for whom English is an L2 or additional language, the definition of academic language varies depending on the perspective of the community of practice. The 'teaching English as a second language' (TESOL) profession views academic language as the language used to carry out academic work at university level as well as the language used by particular disciplines for communication in the field. Within this profession, research has focused on English for specific purposes (ESP) and English for academic purposes (EAP) (Bhatia, 1997; Johns, 1997;

Swales, 1990). In contrast, the ESL profession working with school-age children defines academic language as language needed to succeed academically in all content areas, including the English used to interact in the classroom and the English used to obtain, process, construct and provide subject matter information in spoken and written form using appropriate learning strategies (Valdes, 2004). Two approaches are adopted in this community: the teaching of English as a preliminary to instruction in subject matter and CLIL (Coyle, 2008). The bilingual education profession is concerned with the development of academic language in both English and the L1 of students, focusing almost exclusively on cognitive academic language proficiency (CALP) in contrast to basic interpersonal communication skills (BICS) (Cummins, 1984). This distinction was introduced by Cummins to explain research findings on bilingual children who appeared to be fluent conversationalists but were still below grade expectations on verbal academic performance in both languages (Cummins, 2008). The BICS/CALP distinction formalised the difference between conversational fluency and academic language as two of, but not the only, conceptual components of the language proficiency construct (Cummins, 2008). Cummins and Yee-Fun (2007) distinguish three dimensions of language proficiency: conversational fluency, discrete skills and academic language proficiency. Each follows a different developmental trajectory among L1 and L2 children and each responds differently to particular types of instructional practices. Conversational fluency is acquired within 1 - 2 years in face-to-face conversations and uses high-frequency vocabulary and simple grammatical constructions. Discrete language skills (listening, speaking, reading and writing) involve learning the rule-governed aspects of language (phonology, grammar and spelling), and are developed by direct instruction and/or immersion in a language-rich home or school environment. These skills can develop concurrently with conversational fluency (Weber & Longhi-Chirlin, 2001) within 2 years (Geva, 2000; Lesaux & Siegel, 2003), but there is little transference to academic language proficiency (Kwan & Willows, 1998; Verhoeven, 2000), which requires more focused teaching. Cummins uses CALP and academic language proficiency interchangeably to refer to 'the extent to which an individual has access to and command of the oral and written academic registers of schooling' (Cummins, 2000, p. 67). According to Cummins (2008), the distinction should caution educators against conflating the conversational and academic dimensions of proficiency, which may create academic difficulties for children because of the difference in the timelines for the acquisition of conversational and academic language, which depends on language-teaching practices and can take between 5 and 7 years to reach levels commensurate with grade norms. The implications are that students need support in the acquisition of academic language, and in fact Scarcella (2009; 2011) claims that with adequate teaching and support, academic language can be acquired more rapidly. The BICS/CALP distinction was elaborated (Cummins, 1984) to show how instructional practices could assist learners to catch up academically. Essentially, BICS and CALP could vary along two dimensions: cognitive demand and contextual support, with the best instructional methods involving context-embedded, cognitively demanding tasks (Cummins, 2008). This has implications for teaching quality, which in South Africa is often influenced by low teacher expectations and consequently low cognitive demand in the classroom (Reddy *et al.*, 2006). Cummins (2008), Guthrie (2004) and Wong-Fillmore and Snow (2000) suggest that written texts are a reliable source of academic English but need to be presented with instructional support to aid in language development. Hence teachers need to help children acquire the academic language register by discussing not only the content but also the language used in texts. Teachers can transform text into usable input by helping children to make sense of what they read and drawing attention to how language is used in the materials they are reading (Wong-Fillmore, 1997).

Cummins' model has been criticised (Scarcella, 2003; Valdes, 2004; Edelsky 1990; Martin-Jones & Romaine, 1986; MacSwan, 2000) as an oversimplification of what constitutes contextual support and cognitive demand and for reflecting a 'deficit' perspective (Aukerman, 2007) that attributes academic difficulties to low CALP. However, the BICS/CALP distinction can be related to other theoretical distinctions (see Bruner,

1975; Donaldson, 1978; Olson, 1977; Gibbons, 1991; Gee 1990) and although the terms vary, the basic distinction relates to the extent to which meaning is supported by contextual cues or is primarily linguistic in nature. Westby (1994) shows how both the rhetorical (who is talked to) and referential (what is talked about) dimensions of communication become less context-embedded in school. Along the rhetorical dimension, children are expected to learn to talk not only to individuals as they did in the preschool period, but also to groups of people, and to both familiar and unfamiliar listeners. This requires more specificity in vocabulary and syntax, since the child cannot depend on shared knowledge and must learn to take the listener's perspective. Along the referential dimension, children no longer talk only to meet their social needs, but must learn to talk about past and future experiences, and to generalise and theorise about these experiences, which involves increasing distance from contextual cues. According to Westby (1994), narrative language is particularly important for the development of this decontextualised communication and should be used extensively in the early school years.

Furthermore Wong-Fillmore and Snow (2000) and Cummins and Yee-Fun (2007) maintain that academic language is challenging for both L2 and L1 learners, since few children start school with the ability to interpret text and do not necessarily have the discourse skills required in education.

Language-in-education practices in South African classrooms

In South Africa, the lack of attention to educational linguistics is exacerbated by ill-informed and misunderstood concepts and teaching practices such as 'whole language', 'communicative language teaching' (Heugh, 2009, p. 168) and 'natural language', which have become almost 'orthodoxies' in the education system (Balfour, 2007, p. 6). The communicative approach assumes that language learning only occurs in real-life contexts, where the communicative functions of language drive the acquisition process. Teachers do not act as instructors but as facilitators of the process through natural communication and interaction, using comprehensible input of a sufficiently high quality and complexity to ensure that learners will acquire the semantic and syntactic systems of the language of instruction in a subconscious, implicit way (Balfour, 2007). This approach is based on Krashen's (1988) distinction between acquisition and learning, which are in fact not 'distinct and separate' processes (Baker, 2001, in Reagan, 2009, p. 59), and are both adequately aligned with a constructivist approach to language learning (Reagan, 2009). This approach is discussed in more detail below.

Furthermore, one of the most disabling effects of OBE has been that teachers were encouraged not to teach language and literacy skills explicitly (Heugh, 2009), which meant that learners did not receive the necessary scaffolding to develop these skills. Teacher-training programmes have similarly de-emphasised explicit teaching because they have had to work within the OBE framework because of the substantial financial investment in its introduction and implementation (Heugh, 2009). Although there have been various attempts to remedy the situation from time to time, e.g. the Foundations for Learning Campaign (Tyobeka, 2008), and the Minister of Basic Education's recent announcement of changes to the OBE system (Motshekga, 2010), teachers' language awareness and consequently the power of language in education remains limited. The practice of content- and language-integrated instruction is virtually non-existent, because subject teachers regard language teaching as the responsibility of the language teachers and do not know that they can also teach the language of the subject (Uys *et al.*, 2007). The recent introduction of a training module at North-West University, in which student teachers were shown how to implement this approach, is an encouraging development and proves that it can be done within an outcomes-based framework (Uys, Van der Walt, Botha & Van den Berg, 2006).

The above discussion leads to the conclusion that perhaps the fundamental problem in education is that language learning should

be approached within a 'constructivist epistemology' (Reagan, 2009, p. 54) that focuses on generative mechanisms and processes, while OBE, although claimed to be constructivist (Heugh, 2009), has been misunderstood and thus misdirected. It essentially reflects a positivist epistemology (Balfour, 2007).

Social constructivism

Reagan (2009), in his book *Language Matters*, maintains that theories of learning in general and of language learning in particular are examples of metaphors which are culturally determined cognitive tools that shape our thoughts. It is therefore understandable that there would be different philosophies of learning within a multicultural society such as South Africa, and that what are essentially Western concepts would be misconstrued. To understand what learning is about, and how learning theories have evolved over time, Reagan (2009) argues that one should examine some of the philosophies of learning. Plato, for example, theorised that learning is basically accessing what one already knows, and according to Reagan the Socratic teaching method, involving active engagement with learners, is grounded in this idea. In contrast, the philosopher Locke posited that the child's mind is a '*tabula rasa*' and the 'teacher pours knowledge into the child' (Reagan, 2009, p. 57). This philosophy was adopted by 19th-century psychologists, who emphasised scientific, observable facts in understanding learning, and the philosophy developed into the behaviourist school of psychology, which was influential in education throughout the 20th century. Transmission teaching methods and the audiolingual method in L2 teaching are applications of behaviourist psychology. It is interesting that these teaching methods are still evident in many South African classrooms (Fleisch, 2008), despite the introduction of the new curriculum.

Reagan (2009, p. 59) claims that although cognitive science has changed our understanding of how the human brain learns, there is still a gap between this knowledge and application to classroom practice, and 'the science of learning has not yet emerged ... we are still reliant on metaphors to understand the nature of learning'. According to this author, constructivism is one of the more powerful metaphors, but has not been investigated extensively in the context of language learning. Furthermore, there is no general consensus on the meaning of the concept and whether it is an epistemology, educational philosophy, teaching approach or theory of teaching or learning (Reagan, 2009).

Because metaphors often inform us about what things are not, we do know that constructivism is not a theory of teaching; it is a theory for defining knowledge and learning (Fosnot, 1993, in Reagan, 2009, p. 62) and it rejects traditional, transmission approaches. Constructivism defines knowledge as temporary, developed socially, and mediated culturally. It emphasises the individual learner's construction of knowledge and the personal nature of learning. One of the principles of learning in constructivism is that the classroom is a discourse community, engaged in reflection, conversation and activity (Reagan, 2009).

According to Reagan (2009), there are two competing types of constructivism: radical constructivism, which is Piagetian in orientation and takes a cognitive view of learning, and social constructivism, which is Vygotskian and emphasises the sociocultural context of learning as a socially constructed, mediated process. The two types can, however, be reconciled. Social constructivism is also entirely compatible with direct instruction, and although it is learner-centred, the content and skills of the learning process are the teacher's responsibility (Reagan, 2009). Social constructivism can be applied to language acquisition and learning, if it is correctly interpreted. Furthermore, it is compatible with CLIL (Coyle, 2008; Gibbons, 2002).

Broadly defined, CLIL is instruction in the academic language necessary to accomplish content-area tasks (Sherris, 2008), and it has been shown in research to have a positive impact on learning (Coyle, 2008). Historically, CLIL stems from the position that L2 proficiency is facilitated by using the language as a medium for learning (Mohan,

1986) and it has four key principles of practice: planning content and language goals for each lesson; construction of specific language and content knowledge and skills through interaction; opportunities to develop reading, writing and listening skills within content areas; and assessment of outcomes during lessons (Sherris, 2008).

Social constructivism also informs the practice of speech-language therapists (SLTs) who work with children who do not acquire their L1 naturally. These professionals have learned that to facilitate language learning it is necessary to create authentic, pragmatically appropriate contexts for communication, as in communicative language teaching, but within this it is essential to set explicit language targets and to use selected elicitation techniques and interaction methods that advance the acquisition of language through scaffolding (Owens, 2004). For this reason, SLTs are well positioned to work in collaboration with teachers to enhance language learning in South African classrooms. Two recent studies (Wium, Louw, & Eloff, 2010; Olivier, Anthonissen & Southwood, 2010) confirm that this is not only possible but highly effective.

Conclusion

In the final analysis, and if we acknowledge that one of the primary goals of education is to develop academic language, so that learners may engage meaningfully with the content and subject matter across the curriculum at all stages of the process, it is irrelevant whether the language of learning is the L1 or an additional language, and whether the language is taught as a subject or is the medium of instruction. To achieve academic language proficiency, language-teaching practices that construct the process of learning must be addressed as a matter of urgency.

As Taylor, Vinjevoold and Muller (2003, p. 65) have stated, the most significant issue for quality in education is: 'the all pervasive and extremely powerful influence of language which is unambiguously implicated in learning ... and the need for pupils to have as good a grasp of the language of teaching and learning as possible.'

Well-informed, experienced SLTs may well be able to assist in achieving this goal, by providing input to teacher-training programmes, collaborating with teachers on setting and developing language-learning goals, and developing academic language through CLIL within a social constructivist framework. SLTs must therefore ensure that they are equipped to provide a relevant contribution in the educational context.

References

- Alexander, N. (Ed.) (2005). *Mother tongue-based bilingual education in South Africa: The dynamics of implementation*. Cape Town: Salty Print.
- Andrews, S. (2003). Teacher language awareness and the professional knowledge base of the L2 teacher. *Language Awareness*, 12(2), 81-95.
- Aukerman, M. (2007). A culpable CALP: Rethinking the conversational/academic language proficiency distinction in early literacy instruction. *The Reading Teacher*, 60(7), 626-636.
- Bailey, A.L. (2006). Introduction: Teaching and assessing students learning English in school. In A.L. Bailey (Ed.). *Language demands of school: Putting academic English to the test*. New Haven: Yale University Press.
- Balfour, R.J. (2007). Mother-tongue education or bilingual education for South Africa: theories, pedagogies and sustainability. *Journal for Language Teaching*, 41(2), 1-14.
- Bhatia, V.K. (1997). *Analysing genre: Language use in professional settings*. London: Longman.
- Braam, D. (2004). Community perception of change in a school's language policy. *PRAESA Occasional Paper*, 21, 33-34.
- Brice, A., & Brice, R. (2000). Language in the classroom: comparisons of four bilingual environments. *The South African Journal of Communication Disorders*, 47, 91-98.
- Brock-Utne, B., & Skattum, I. (2009). *Languages and education in Africa: A comparative and transdisciplinary analysis*. Oxford: Symposium Books.
- Broom, Y. (2004). Reading English in multilingual South African primary schools. *Bilingual Education and Bilingualism*, 7(6), 506-528.
- Brumfit, C. (1997). The teacher as an educational linguist. In L. van Lier & D. Corson (Eds.). *Encyclopaedia of language and education*, Vol. 6: *Knowledge about language* (163-171). New York: Springer.
- Bruner, J.S. (1975). Language as an instrument of thought. In A. Davies (Ed.). *Problems of language and learning* (pp. 61-88). London: Heinemann.
- Cazden, C. (2001). *Classroom discourse: The language of teaching and learning* (2nd ed.). Portsmouth: Heinemann.
- Chamot, A.U. (2005). The cognitive academic language learning approach (CALLA): An update. In P. Richard-Amato & M.A. Snow (Eds.). *Academic success for English language learners*. White Plains, NY: Longman.
- Coyle, D. (2008). CLIL – a pedagogical approach from the European perspective. In N.V. Deussen-Scholl & N.H. Hornberger (Eds.). *Encyclopedia of language and education: Second and foreign language education*. New York: Springer Science.
- Cummins, J. (1984). Wanted: A theoretical framework for relating language proficiency to academic achievement among bilingual students. In C. Rivera (Ed.). *Language proficiency and academic achievement* (p. 10). Clevedon: Multilingual Matters.
- Cummins, J. (2000). *Language, power and pedagogy*. Toronto: Multilingual Matters.
- 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.
- Department of Education. (2005). *Grade 6 Intermediate Phase Systematic Evaluation Report*. Pretoria: Department of Education.
- Donaldson, M. (1978). *Children's minds*. Glasgow: Collins.
- Du Plessis, S., & Louw, B. (2008). Challenges to preschool teachers in learner's acquisition of English as language of learning and teaching. *South African Journal of Education*, 28, 53-75.
- Du Plessis, S., & Naude, E.C. (2003). The needs of teachers in preschool centres with regard to multilingual learners. *South African Journal of Education*, 23, 122-129.
- Edelsky, C. (1990). *With literacy and justice for all: rethinking the social in language and education*. London: Falmer Press.
- Fleisch, B. (1995). Social scientists as policy makers: EG Malherbe and the National Bureau for Social and Educational Research, 1929-1943. *Journal of Southern African Studies*, 21(3), 349-372.
- Fleisch, B. (2008). *Primary education in crisis: Why South African school children underachieve in reading and mathematics*. Cape Town: Juta & Co.
- Gee, J.P. (1990). *Social linguistics and literacies: Ideologies in discourses*. New York: Falmer Press.
- Geva, D. (2000). Issues in the assessment of reading disabilities in L2 children: Beliefs and research evidence *Dyslexia*, 6, 13-28.
- Gibbons, P. (1991). Classroom talk and the learning of new registers in a second language. *Language and Education*, 12(2), 99-118.
- Gibbons, P. (2002). Scaffolding language, scaffolding learning: Teaching second language learners in the mainstream classroom. Portsmouth, NH: Heinemann.
- Guthrie, J.T. (2004). Teaching for literacy engagement. *Journal of Literacy Research*, 36, 1-30.
- Heugh, K. (2000). The case against bilingual and multilingual education in South Africa. *PRAESA, Occasional Papers* 6.
- Heugh, K. (2006, March). An evaluation of language education models in Africa: findings & recommendations from the UNESCO Institute for Education-ADEA stocktaking report on Lingua. Paper presented at the International Conference on Bilingual Education, Maputo, Mozambique.
- Heugh, K. (2009). Into the cauldron: An interplay of indigenous and globalised knowledge with strong and weak notions of literacy and language education in Ethiopia and South Africa. *Language Matters*, 40(2), 166-189.
- Holmascott, H. (2003, December). Literacy in two languages? Implementation of language policy in a post-colonial context. Paper presented at the Neetreed Conference, Gausdal Hoyfjellshotell, Norway.
- Howie, S. (2005a). Contextual factors in the school and classroom level related to pupils' performance in mathematics in South Africa. *Educational Research and Development*, 11(2), 123-140.
- Howie, S. (2005b). System-level evaluation: Language and other background factors affecting mathematics achievement. *Prospects*, 64(1), 119-157.
- Johns, A.M. (1997). *Text, role and context: Developing academic literacies*. Cambridge: Cambridge University Press.
- Jooste, N. (2003). Learning through a second language: A comparative study of the performance in reading comprehension and the cognitive-linguistic processes involved in reading comprehension between first-language English learners and second-language English, first-language isiXhosa learners at a Grade 5 level. Unpublished M.A. dissertation, University of Cape Town.
- Krashen, S. (1988). *Second language acquisition and second language learning*. Hemel Hempstead, Herts: Prentice Hall.
- Kwan, A.B., & Willows, D. (1998). Impact of early phonics instruction on children learning English as a second language. Paper presented at the National Reading Conference, Austin, Texas.
- Lesaux, N.K., & Siegel, L.S. (2003). The development of reading in children who speak English as a second language. *Developmental Psychology*, 6, 1005-1019.
- MacSwan, J. (2000). The threshold hypothesis, semilingualism and other contributions to a deficit view of linguistic minorities. *Hispanic Journal of Behavioural Sciences*, 22(1), 3-45.
- Malherbe, E.G. (1977). *Education in South Africa, 1923- 1975*. Cape Town: Juta.
- Martin-Jones, M., & Romaine, S. (1986). Semilingualism: A half-baked theory of communicative competence. *Applied Linguistics*, 7, 26-38.
- Meier, C. (2005). Addressing problems in integrated schools: student teachers' perceptions regarding viable solutions for learners' academic problems. *South African Journal of Education*, 25(3), 170-177.
- Meirim, G., Jordaan, H., Kallenbach, M., & Rijhumal, M. (2010). Development of semantic processes for academic language in foundation phase EAL learners. *South African Journal of Communication Disorders*, 57, 43-50.
- Mohan, B. (1986). *Language and content*. Reading, MA: Addison-Wesley.
- Moloi, M., & Strauss, J. (2005). The SACMEQ II Project in South Africa: A study of the conditions of schooling and the quality of education. Retrieved on 24 April 2011 from <http://www.sacmeq.org/links.htm>
- Morrow, N., Jordaan, H., & Fridjoh, P. (2005). The effects of educational context on the understanding of linguistic concepts in English and isiZulu by grade 7 learners. *South African Journal of Education*, 25, 164-169.
- Motshekga, A. (2010). Statement by the Minister of Basic Education on the progress of the review of the National Curriculum Statement. Retrieved on 12 August 2010 from www.education.gov.za/LinkClick.aspx?fileticket=7hWWPlhfufQ%3D
- Mroz, M. (2006). Teaching in the foundation stage – how current systems support teachers' knowledge and understanding of children's speech and language. *International Journal of Early Years Education*, 14(1), 45-61.
- Mtshali, N., & Smillie, N. (2011). Many of our kids can't read or write: Study shows pathetic state of primary school education. *Sunday Times*, June 29.
- O' Connor, J., & Geiger, M. (2009). Challenges facing primary school educators of English second (or other) language learners in the Western Cape. *South African Journal of Education*, 29, 253-269.
- Obondo, M.A. (2008). Bilingual education in Africa: An overview. In J. Cummins & N.H. Hornberger (Eds.). *Encyclopaedia of language and education* (2nd ed., Vol. 5, pp. 151-161). New York: Springer Science.
- Olivier, A.M., Anthonissen, C., & Southwood, F. (2010). Literacy development of English language learners: The outcomes of an intervention programme in grade R. *South African Journal of Communication Disorders*, 57, 58-65.
- Olson, D.R. (1977). From utterance to text: the bias of language in speech and writing. *Harvard Educational Review*, 47, 257-281.
- Owens, R.E. (2004). *Language disorders: a functional approach to assessment and intervention* (4th ed.). Boston: Pearson Education.
- Pienaar, M. (2009). Multilingualism and educational interpreting: Innovation and delivery. *Language Matters*, 40(2), 266-267.
- Probyn, M. (2001). Teachers' voices: Teachers' reflection on learning and teaching through the medium of English as an additional language in South Africa. *International Journal of Bilingual Education and Bilingualism*, 4(4), 249-266.

- Reagan, T. (2009). *Language matters. Reflections on educational linguistics*. USA: Information Age Publishing.
- Reddy, V. (2005). Cross-national achievement study: Learning from South Africa's participation in the Trends in International Mathematics and Science Study (TIMSS). *Compare*, 35(1), 63-77.
- Reddy, V., Kanjee, A., Diedricks, G., & Winnaar, L. (2006). *Mathematics and Science Achievement at South African Schools in TIMSS 2003*. Pretoria: HSRC Press.
- Saville-Troike, M. (1984). What really matters in second language learning for academic achievement? *TESOL Quarterly*, 18(2), 199-219.
- Scarcella, R. (2003). Academic English: A conceptual framework. In *The University of California Linguistic Minority Research Institute Technical Report*. Santa Barbara, CA: University of California.
- Scarcella, R. (2009). Academic language for English language learners. Retrieved on 5 June 2009 from <http://www.colorincolorado.org>
- Scarcella, R. (2011). Academic language – across school contexts: Helping all pupils access the curriculum. Paper presented at SAALED congress, Cape Town Convention Centre, 30 March - 2 April.
- Sherris, A. (2008). Integrated content and language instruction. *Centre for Applied Linguistics Digest*, September. Retrieved on 7 August 2009 from www.cal.org
- Swales, J.M. (1990). *Genre analysis: English in academic and research settings*. Cambridge: Cambridge University Press.
- Taylor, N., Vinjevold, P., & Muller, J. (2003). *Getting schools working: Research and systemic school reform in South Africa*. Cape Town: Pearson Education South Africa.
- Taylor, S., & Yu, D. (2008). The importance of socio-economic status in determining educational achievement in South Africa. Development Policy Research Unit. Stellenbosch University, Department of Economics, Working Papers.
- Tyobeka, P. (2008). Foundations for learning assessment framework foundation phase. South Africa: Department of Education.
- Uys, M., Van der Walt, J., Botha, S., & Van den Berg, R. (2006). An integrated course for English-medium of instruction teacher trainees in South Africa. *Journal for Language Teaching*, 40(2), 68-86.
- Uys, M., Van der Walt, J., Van den Berg, R., & Botha, S. (2007). English medium of instruction: A situation analysis. *South African Journal of Education*, 27(1), 69-82.
- Valdes, G. (2004). Between support and marginalization: The development of academic language in linguistic minority children. *International Journal of Bilingual Education and Bilingualism*, 7, 102-132.
- Van der Sandt, S., & Niewoudt, H. (2003). Grade 7 teachers' and prospective teachers' content knowledge of geometry. *South African Journal of Education*, 23(3), 199-205.
- Van Rooyen, D., & Jordaan, H. (2009). An aspect of language for academic purposes in secondary education: complex sentence comprehension by learners in an integrated Gauteng School. *South African Journal of Education*, 29(2), 271-287.
- Verhoeven, L. (2000). Components in early second language reading and spelling. *Scientific Studies of Reading*, 4, 313-330.
- Webb, V.A., Lafon, M., & Pare, P. (2010). Bantu languages in education in South Africa – Ongekho akekho! The absentee owner. *Language Learning Journal*, 37(3), 273-292.
- Weber, R., & Longhi-Chirlin, T. (2001). Beginning in English: The growth of linguistic and literate abilities in Spanish-speaking first graders. *Reading Research and Instruction*, 41, 19-50.
- Westby, C. (1994). Communication refinement in school age and adolescence. In O. Haynes & B. Shulman (Eds.). *Communication Development: Foundations, processes and Clinical Applications* (pp. 341-383). Englewood Cliffs, NJ: Prentice-Hall.
- Western Cape Education Department (2004). *Grade Six Learner Assessment Study 2003: Final Report*. Cape Town: Western Cape Education Department.
- Wium, A.M., Louw, B., & Eloff, I. (2010). Speech-language therapists supporting foundation phase teachers with literacy and numeracy in a rural and township context. *South African Journal of Communication Disorders*, 57, 14-21.
- Wong-Fillmore, L. (1997). *Authentic literature in ESL instruction*. Glenview, IL: Scott Foresman.
- Wong-Fillmore, L.W., & Snow, C.E. (2000). *What teachers need to know about language*. USA: Clearing House on Language and Linguistics.
- Wright, T., & Bolitho, R. (1997). Towards awareness of English as a professional language. *Language Awareness*, 6(2&3), 162-170.