TEACHING AND LEARNING IN TWO LANGUAGES IN AFRICAN CLASSROOMS

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ABSTRACT

In sub-Saharan Africa, education conducted through a European language is associated with low school achievement. Both teachers and learners may often not be fluent enough to use the language as a medium of instruction. In these circumstances, both also make use of a common African language. They switch between two languages in the plenary classroom and − less commonly − learners talk in the African language when working in groups. These uses of African languages are often condemned by authorities and teachers feel uneasy about them. In other parts of the world, bilingual education is often planned, supported by authorities, underpinned by theory and its procedures well-defined. In the absence of such planning, teachers in Africa tend to generate their own creative bilingual practices. In this article we describe the extent to which this occurs, the forms it takes and the possible educational value these practices may have. We discuss the attitudes of teachers and authorities to the use of two languages. The article focuses in particular on the way low learner ability in the medium of instruction limits talk and necessitates bilingual interaction, and outlines ways in which teachers can make adjustments to the management of bilingualism in the classroom which facilitate learning in a European language. It emphasises the relative absence in African teacher education of the specialist pedagogy which learners with low ability in the medium of instruction require and proposes that bilingual education be formally recognised and promoted by authorities.

CONTENTS

1. INTRODUCTION

In classrooms in sub-Saharan Africa, in which a European language is the official medium of instruction (MoI), it is common, but rarely officially sanctioned, for teachers and learners to make use of an African language. This practice is controversial because authorities often condemn it, teachers feel uneasy about it, but research often sees benefit in it. In this article we discuss the educational value of using two languages in this context. We explore both practices which are frequent, such as teacher code-switching (CS), and those which are rare, such as learners talking in their mother-tongue in groups. We refer to a considerable body of research in African classrooms in which English is the MoI, but also make occasional reference to the wider literature on CS in similar conditions elsewhere. We highlight in particular the circumstances which apply when learning takes place in a MoI in which the ability of learners is limited.

This paper should be seen against the background of a debate in academic and educational circles on the use of languages in African education which links the current role of European languages with low school achievement. There is widespread evidence that learners working through the medium of European languages in African schools cannot speak them well enough to use them as media for learning (Criper and Dodd, 1984; Macdonald, 1993; Williams and Cooke, 2002; Dutcher, 2004; Probyn, 2005; Alidou et al, 2006). Learners starting to learn through English in English-medium school systems have far more limited English language ability than the expanding curriculum demands (Macdonald, 1990). The debate is complicated by evidence that initial early-exit schooling (for three to four years) in African languages, familiar in much of Africa, while valuable in cultural and community terms, cannot develop the fundamental cognitive and literacy skills in the first language which learners later transfer to education in a European language (Heugh, 2006). Heugh proposes that six to eight years of high-quality education in the mother-tongue is necessary to enable learners to achieve their full potential. This is not available for most learners in any African country. African schools are therefore a difficult context in which to teach and learn and one in which participants need to use any practice which helps them to do so.

In African school systems, learners often learn through an African language for the first three or four years before changing the MoI to a European language. This has been conventional in most English-medium countries for many years; in Tanzania and Ethiopia L1 is used throughout primary education. Initial education in African languages in French- and Portuguese-medium systems has developed in several countries more recently. In African classrooms, learners and teachers are often multilingual: they may speak several African languages as well as – to a greater or lesser extent – a European language. It is difficult to define one of these African languages as the first language, or the European language as the second. We are also aware that in many classrooms, learners may not be wholly fluent in the African language which is a MoI and thus the language into which a teacher working in a European language may switch. However, for convenience, we refer in this paper to the local African language used in school as the mother-tongue or first language (L1), to the official European language as second language (L2) and to the classroom in which the official language is European as the L2-medium classroom. Since we are referring only to classrooms in which a European language is the official MoI, the MoI is always the L2, unless otherwise stated.

2. LANGUAGE ALTERNATION

Language alternation in multilingual school classrooms takes many forms, of which CS is only one. CS is often assumed to refer to a style of short-term alternation between languages: teachers or learners switch into an alternate language for a short stretch of talk and switch back. The code-switched utterance is limited in length. Teachers may do this frequently throughout a lesson. However, in African classrooms as elsewhere, code alternation takes other forms. There may, for example, be long stretches of monolingual teacher talk in either language, within a code-switching environment. Alternation also sometimes takes place according to forms of interaction: for example, L2-medium teacher-talk in the plenary

classroom, either monolingual or code-switched, may give way to monolingual pair- or group-activity in L1 which continues for some time until the teacher resumes plenary interaction in the MoI. It should be noted that in African classrooms, language alternation is largely unplanned – the often unpremeditated response of individual teachers to circumstances in their immediate classroom environment. In contexts other than Africa, language alternation may be used intentionally on the basis of an explicit theory of bilingual education which encourages the use of two languages, either in fairly free alternation or strictly separated – as for example in two-way bilingual education in the USA (Garcia 2009). Language alternation may also focus around input and output: Garcia (2009) and Ferguson (2003) report, for example, on the practice used in Welsh bilingual education of explicitly distinguishing between one language used for input (e.g. reading, listening) and another for output (talk and writing. In this paper, we will focus on the main forms of code alternation in use in African classrooms: conventional CS, and the use of languages in group- and pair-activities.

2.1. Code-switching

De Klerk (2006: 602) defines CS as 'the use of more than one variety or language in the same conversation'. Moodley (2007: 709) unpacks this definition further and defines CS as 'the alternate use of two (or more) linguistic varieties (languages, dialects, registers of the same language) at the intersentential level, i.e. at the word, phrase or clause, or sentence level within the same speech event and across sentence boundaries'. CS is distinguished from code-mixing in that the latter is intrasentential: switching occurs within a single sentence. 'Tag-switching' involves the insertion of a tag (such as English you know, eh? or come on) into a sentence. However, Canagarajah (1995) takes the view that distinguishing formally between types of code alternation adds little to the discussion of its sociolinguistic and discourse functions. In this paper we will take the same view, treating these categories as sub-classes of CS and focussing on how its use in the classroom influences teaching and learning in two languages.

CS in African schools often assumes that lessons are transacted mainly in the L2 which is the official MoI and that when participants switch into the L1, this represents a divergence from the norm of the L2-medium classroom. There is, in other words, an unequal relationship between L1 and L2. L2 is assumed to be a base language: it is the dominant language of the classroom both in the sense that it is the official MoI and that it will constitute the majority of language use in the lesson, and especially the majority of teacher-talk. In this view, participants switch briefly into L1 and then back into the official MoI. The intervening stretches of L1 talk are relatively short, from one word to several short utterances.

This accords with one view of CS in bilingual discourse in general, which suggests that bilinguals 'choose' a base, or 'matrix' language; into which the other language is 'embedded' (Myers-Scotton, 1995). They switch out of this language into another and back into it. Several factors characterise the base language. Formally speaking, more language is expressed in it; socio-politically, it may be preferred for various reasons by the language community (for example, in school it may have official status as MoI), and psycholinguistically (Auer, 1995), the speaker may be more proficient in it. In African classrooms, the official status of the L2 often confers dominant status on it and often limits the degree to which teachers and learners may switch into L1. At the same time, paradoxically, the L2 competence of both may be inadequate and thus motivate switching into L1.

It is useful to ask how much CS goes on in African classrooms. We might measure this in terms of the amount of language expressed in both languages in a given lesson, or in terms of the relative frequency with which CS is observed to occur in a sample of lessons. In passing it is relevant to point out that in lessons observed for research purposes, teachers often reduce the amount of L1-talk by both themselves and their learners (Probyn 2006) and that when they are unobserved, both are higher.

As far as the question of amount of language per lesson is concerned, research results vary In a South African survey, Probyn (2005) reports that while most teacher-talk was in English, teachers varied widely in the amount of L1 they used: some conducted whole lessons almost

completely in L1 while others stuck to English as far as possible and used CS for increasing comprehension. In a study in Zanzibar Rea-Dickens and Afitska (2010, personal communication) report that teachers observed using CS did so some of the time in 20% of lessons observed, most of the time in 11% and rarely in 18%. There is evidence that in many L2-medium lessons the majority of teacher language use is in the L1 (Probyn 2006; Brock-Utne and Holmarsdottir 2003). Teachers do this by using a large number of short switches into the L1, which together constitute the majority of language use in the lesson; or they adopt a pattern of translating – a teacher may translate many L2 sentences into the L1 (Brock-Utne and Holmarsdottir 2003). Teachers may also use long stretches of L1-talk (Binding 2003; Probyn 2006; Arthur and Martin 2006), resulting in a lesson in which L1-medium teacher-talk may dominate. In these cases, the L2, although the official MoI, may be used for a lesser amount of lesson time than the L1 and thus becomes the subordinate language of instruction in terms of the extent of its use. Switches into the official MoI, rather than the L1, become the marked form. It is probably common in some contexts (Brock-Utne and Holmarsdottir 2003; Brock-Utne 2005) for large amounts of teacher-talk to be in L1. Probyn (2006) suggests that in some cases L1 may be sometimes de facto the oral language of the school.

As far as frequency of teacher CS is concerned, evidence that it is common is plentiful in different parts of Africa. Bunyi (2005) reports that in Kenyan classrooms CS is common. A study by Mwinsheikhe (2003, 2009) in Tanzania reveals that 89% of the teachers interviewed used CS. Research by Abd-Kadir and Hardman (2007) in Nigeria and Kenya found that CS was used in over two thirds of the Nigerian classrooms and over half of the Kenyan classrooms studied. Rea-Dickens and Afitska (2010) report that teachers in Zanzibar were observed using L1 in 49% of observed lessons. Learner CS is also common. Learner responses to teacher elicitations in the plenary classroom may be in L2 but are often in L1 (Probyn 2005).

2.2. Language alternation and interactional forms

CS patterns are also affected by forms of interaction in the classroom and particularly by whether they take place in the plenary classroom or in small groups or pairs, between teacher and learners or between learners themselves. Most instances of CS recorded in the literature are teacher code-switches in the plenary classroom; some are learner switches in response to teacher elicitations, which can occur with the encouragement of the teacher or less frequently in spite of their disapproval. Teachers also switch into L1 when they work briefly with groups, pairs or individual learners and there is evidence that they may use L1 more frequently in these more private interactions (Probyn, 2006). CS by learners, where it is permitted, occurs in plenary interactions with the teacher or in pair- and group-work.

Group talk is largely in L1 (Brock-Utne 2004; Probyn 2005; Arthur and Martin 2006) since learners are not fluent enough to engage in it in L2. It is thus another instance of language alternation in African classrooms. As we discuss below, group talk in which learners explore new concepts has a potentially high learning value. L1-medium talk has this value even in the L2-medium classroom: talking through a concept in L1 allows learners to reach an understanding of a concept which they would be unlikely to reach in L2; it can also, paradoxically, make it easier for learners subsequently to express this understanding in L2.

Data on learner CS in groups is rare, partly because research tends to study plenary interaction rather than talk in groups and pairs. It is also the case, however, that relatively little group or pair learning takes place in African classrooms (Arthur and Martin, 2006). Group- and pair activities are often infrequent in educational contexts elsewhere in the world (Alexander, 2000), especially in the secondary phase. However, they are probably more infrequent in African classrooms (Alidou and Brock-Utne 2006). Teachers know that learners will use their L1 in groups and pairs, both because it is natural and because their L2 ability is often too limited for learner-led informal talk. Because L1-medium learner talk is officially frowned upon – as well perhaps as group-work per se – teachers tend to avoid group and pair work. As learners increase their L2 ability, however, they become more able to use it in group and pair activities in which both languages – and thus CS – are used. Where bilingual group talk does occur, it can

have cognitive and linguistic advantages. Moodley (2007:718) writes of a study of more fluent Zulu-English bilingual learners:

> "[The findings reveal that] by the strategic use of learners' native language, by means of intersentential and intrasentential code-switching, learners themselves in learner-learner interaction were able to: enhance their vocabulary by providing NL (native language) equivalents or synonyms or explanations; grasp difficult ideas and concepts; embellish ideas and concepts; provide meaningful and significant additional information, thus building on their existing knowledge; clarify questions and instructions to facilitate progress of the discussion; promote understanding of the outline, characters and themes of literary texts studied, and promote listening and speaking skills"

There is, however, little research evidence that even more advanced L2 users in Africa receive more group- and pair-work opportunities. The rarity of group- and pair-work severely reduces learners' opportunities for learning through talk.

3. DETERMINANTS OF CLASSROOM LANGUAGE ALTERNATION

3.1. Users

An essential determinant of the definition of CS in the classroom is the user. A fundamental distinction is whether the speaker is the teacher or the learner. Most studies of CS in African schools focus on the teacher; we know less about why learners code-switch and in what discourse and social contexts they do it. This emphasis is also reflected in this paper. To a degree this makes sense in that – in classrooms generally – most talk is teacher-talk: the teacher directs classroom activities, takes most of the turns and produces most of the long utterances. Learners take few turns and use short utterances (Hardman, 2008). In addition, as mentioned above, in African L2-medium classrooms, learners are more silent than in classrooms in which learners are fluent in the MoI. There is thus much less talk by learners than by teachers – and less data on their CS practices.

However, learners clearly do code-switch; and if some uses of CS have pedagogical value, it is a strategy they need to use. When we consider the value of CS, the amount of data on teacher CS allows us to view something of the range of types and purposes of switches and to assess which might be pedagogically most useful to teachers. However – and especially in view of the evidence for stricter regulation of learner CS – we should also ask which switching practices are similarly useful to learners and help teachers to encourage them. In this regard, more studies of learner CS would be useful.

3.2. Language Ability.

A fundamental reason for switching into the learners' L1 in the L2-medium classroom is the level of L2 language ability on the part of either teacher or learners: participants switch into the more familiar language to make communication easier for themselves or their interlocutors. Ease of communication in the familiar language is not the only purpose of teacher CS: section 4 of this paper describes a range of teacher intentions, to do, for example, with classroom management, the maintenance of interest or the strengthening of affective bonds. All of these are, however, in some way subordinate to the fact that not all the participants in the classroom are confident enough in the medium of instruction to use it exclusively as the language of learning and teaching. This is one factor which distinguishes classroom CS from CS as an integral characteristic of communication in bilingual communities, where a variety of social, psychological and discourse factors trigger a switch (Baker, 2001).

Most classroom CS is participant-related. In other words it is stimulated by what the speaker perceives as a need of the interlocutors in a conversation (Auer 1995; Martin-Jones 1995). More specifically it is hearer-orientated. For instance, a teacher may switch in anticipation that learners may not understand, or because they wish to appeal to local knowledge. It is thus distinguished from discourse-orientated CS in which speakers change codes according to their communicative purpose: they may for example switch codes to signal a topic shift or mark a concept as important. Martin-Jones (1995) points out that participant-related switching is especially frequent in bilingual or L2-medium classrooms where teachers need to bear in mind the L2 competence of their learners. Indeed, research into teacher CS in African classrooms focuses mainly on participant-related switches: in other words the response of the teacher to the perceived language needs of learners and the switches which they make accordingly to enable them either to understand concepts or to talk about them.

Nussbaum (1991, quoted in Arthur, 1996) distinguishes between hetero-facilitative and self-facilitative switching. Participants use hetero-facilitative switching to help their interlocutors understand and self-facilitative switching to help themselves around language problems occasioned by insufficient fluency or language-related lack of confidence. Teachers in Africa do switch for self-facilitative reasons because they may be insecure in the L2 (e.g. Ndayipfukamiye, 1994; Cleghorn, 1992, Brock-Utne, 2005) and may feel their language ability does not allow them to perform all the pedagogical functions which they would wish to perform. Research on teacher CS in Africa, however, focuses more on hetero-facilitative switches.

Learners in bilingual contexts generally also switch codes for discourse- and participant-related purposes and for hetero- and self-facilitative purposes. Discourse-related purposes include, for example, switching to L1 to change topic: Canagarajah (1995) reports that learners in Sri Lanka may switch to L1 when talking about matters to do with their personal or out-of-school lives. They may also do so in interaction with the teacher when focussing, for example, on classroom management issues. Participant-related choices determine learners' language preference when they work in pairs or groups: learners often choose to work in their L1. This is also a self-facilitative choice if they have low ability in the MoI. In plenary classrooms, self-facilitative switching predominates; learner-talk is normally directed to the teacher and learners who struggle to express themselves in the MoI may switch – if this is allowed – to the L1 (Arthur and Martin, 2006). More rarely, learners may also use hetero-facilitative switching in the plenary classroom if they engage in public interaction with peers – or even more rarely, teachers – and switch to L1 if they see that this helps their interlocutor (Yletyinen, 2004).

3.3. The age factor.

Classroom talk in L1 is likely to be especially frequent with learners who are younger and who have not yet had time to develop their L2 ability. This may be particularly the case in contexts where societal exposure to the L2 is low and where learners start learning in L2 at an early age. In Africa it is likely to be the case in those countries which change the MoI from L1 to L2 at grade 3 or 4 and where L2 teaching before the change of medium has not been sufficient to raise the L2 ability of learners to the level which would enable them to learn effectively through L2 (Macdonald, 1990). The transition from L1 to L2 must necessarily involve a lot of classroom CS by teachers and learners. International experience in bilingual education suggests that learners with initial and developing levels of L2 need a classroom language environment in which both teachers and learners make use of L1 (Thomas and Collier, 2002). Learners are expected to increase their ability to use L2 over time, through carefully contextualised and scaffolded activities, in which L1 use by both teachers and learners plays a significant part. Because research into African classrooms tends to focus less on the early grades, no widespread picture emerges of the degree to which in this age group either teachers or learners use L1 in what are in theory L2-medium classrooms, though important work is done in particular institutions such as PRAESA at the university of Cape Town: Bloch and Alexander (2003), for example, describe classrooms in which learners' bilingualism and biliteracy are explicitly developed. There is some evidence to suggest that in some African countries these early language learning contexts are treated by both teachers and education authorities as somewhat distinct from later grades especially in secondary schools, with regard to the role of

L1: the use of learners' L1s is permitted to greater extent, because it is assumed to be normal, necessary and beneficial for learning (Merritt et al, 1992).

4. PEDAGOGICAL FUNCTIONS OF TEACHER CS.

Research defines teacher CS in particular in relation to the pedagogical function it serves. Researchers attempt to assign a variety of functions to it. It is not easy to do this with accuracy: teachers are often not themselves conscious of what triggers switches in the moment-to-moment progress of classroom discourse. Martin-Jones (1995) notes that it is impossible to classify all instances of classroom CS since there are so many. It should also be said that the occurrence of classroom CS may well be to some extent haphazard: its manifestations may not easily show either pattern or intentionality (Garcia, 2009). However, there is a degree of agreement in the literature as to the broad functions which teacher CS serves. Functions which appear most often in the literature relate (Ferguson, 2003) either to curricular contents or to non-content matters such as affective and social relations in the classroom and classroom management.

4.1. CS related to curricular contents.

a) Clarification/Repetition

One frequent function of teacher CS recognised by most observers is to clarify a concept: teachers switch into the L1 in order to make clearer what they have said in L2. Switching is often triggered by the teacher's assumption that the class (or specific learners) have not understood – on the basis for instance of a marked lack of response (Probyn 2006, Altinyelken, 2010). The L1 utterance may either repeat the L2 utterance (Binding, 2003; Merritt et al, 1992) or explain (Canagarajah, 1995) or further qualify it (Merritt et al, 1992; Adendorff, 1996), or it may be a combination of any or all of these. It may also be an L1 comprehension check (Binding, 2003; Yletinen, 2004) to establish what learners have understood. CS can also help teachers to gauge learner-conceptions of curricular concepts in order to guide subsequent teaching (Rollnick and Rutherford, 1996). Some styles of concept-focussed CS remain anchored in the L2, introducing little new information in the L1, but using it mainly to reformulate or explain. Other styles explicitly use the L1 code-switched element to introduce new concepts which have not been mentioned in L2 (Adendorff, 1996).

This essentially concept-focussed form of CS may function specifically at the level of the word or phrase. To convey a L2 subject concept which has a good enough L1 equivalent known to the learners, the teacher will slot the L1 item into the L2 discourse (Cleghorn, 1992; Merritt et al 1992; Bunyi, 2005; Canagarajah, 1995). Many teachers (Butzkamm, 1998) view this strategy as a useful short-cut to meaning, sparing them the effort of lengthy explanations in L2. Merritt et al (1992) note the difficulty of attempting to convey the meaning of a scientific L2 term into L1 where no L1 equivalent exists, as may be the case with some subject-specific items. Teachers may also translate words on a regular basis (Bunyi, 2005). The insertion of a lexical item from the alternate code also occurs from L1 into the MoI, especially as far as subject-specific terms are concerned which are more available in the MoI. In other words a teacher inserts, for example a scientific L2 term into an L1 explanation (Cleghorn, 1992; Martin, 2005; Arthur and Martin, 2006). Concepts – such as those embedded in local culture – for which there may be no L2 equivalent will also trigger a switch into L1 at the lexical level (Cleghorn, 1992).

If the term is both a new L2 item as well as an unfamiliar concept to the learners, the teacher may need to insert an L1 explanation; this is equally the case if the L2 concept has no L1 equivalent. Cleghorn (1992) and Setati et al (2002) refer to the necessity of explaining new and especially subject-specific concepts by relating them to the common sense world, to practical and concrete examples, and linking them with out-of school contexts familiar to learners; it can make sense to do this in L1.

b) Attention

CS into L1 also serves the purpose of emphasising a concept or drawing attention to it (Probyn 2006). This function often coincides with clarification – the fact that the teacher switches into L1 marks the concept as important, as well as increasing comprehension of it (Merritt et al,1992; Adendorff, 1996). Binding (2003) notes that teachers may also start a sequence of discourse in the L1, in order to signal the importance of a concept.

c) Text and curriculum

Some observers note that teachers choose specifically to use L2 to express concepts which are especially closely related to the formal contents of the curriculum. They do this in particular when expressing terms, formulae or explanations which learners may be called upon to express in examinations, or when working with subject textbooks (Canagarajah, 1995; Yletinen, 2004). Cleghorn (1992) and Arthur and Martin (2006) note that teachers use L2 to highlight key formal L2 expressions which are likely to occur in examinations, thus raising learners' metalinguistic awareness (Cleghorn, 2005). Arthur and Martin (2006) remark on the tendency of teachers in Brunei when working with a textbook to use L2 to read and quote from the text and to switch into L1 to explain and expand on text-based concepts; Canagarajah (1995) records a teacher who translated L2 text-based sentences into L1, as well as adding L1 commentary. Martin (1996) notes the use of L1 in Brunei to explain textual contents and motivate learners to engage with them, but also (Ferguson, 2003) to demarcate text on the one hand and oral commentary on it on the other. The use of L2 for text-related activity and L1 for explanatory and discursive activity can take a more formalised form in which oral work is in the L1 and reading-related work in the L2.

4.2. CS for affective, social and management purposes.

Teachers are widely reported to use CS to create affective and social bonds between themselves and their learners and within the class as a community (Ferguson, 2003). Teaching in L2 creates more distance between teachers and their learners than teaching in L1. This is not only because learners' comprehension may be poorer, but because teachers are unable to use the L2 to fulfil the wide range of non-conceptual objectives which teacher-talk serves. Teachers thus need to make an extra effort to close this distance and express community solidarity (Adendorff, 1996). They also use talk to motivate and encourage learners (Adendorff, 1996; Canagarajah, 1995), to put them at their ease, to make jokes (Alidou and Brock-Utne, 2006), admonish and discipline them (Canagarajah, 1995, Altinyelken, 2010), to refer to extra-curricular and out-of-school matters, to express asides, to address individual learners (Cleghorn, 1992; Adendorff, 1996) or deal with their individual issues personally (Merritt et al, 2002; Yletinen, 2004). To express these functions in L2 can require a high degree of informal fluency. Many teachers – in particular in African contexts – may not have this fluency. However, even L2-fluent teachers may choose to switch into L1 to express these functions in order to close the emotional and social distance created by the L2 between them and their learners. In this way, while the L2 tends to have crucial but limited functions of focussing on curricular contents, the L1 – as well as being used for explanatory and clarificatory purposes – is also the channel for this range of important non-content messages which scaffold and oil the wheels of content learning (Butzkamm,1998).

A related use of teacher switching into L1 is to make a local reference – to the locality or to local culture (Canagarajah, 1995; Binding, 2003; Probyn 2006). The switch may be the insertion of a single lexical item into L2 discourse or a more discursive reference. The concept may have no L2 equivalent and therefore require an L1 reference, but it also has the cohesive force which L1 switches for affective and social purposes possess.

Teachers also switch to L1 for the purposes of classroom management (Canagarajah, 1995; Yletinen, 2004;). In African classrooms this is common (Merritt et al, 1992; Binding, 2003; Bunyi, 2005; Probyn 2006). They may use the L1 to give instructions for an activity (Altinyelken,

2010), refer to a page number, organise group-work, etc. This can ensure comprehension of what may be a crucial move in lesson procedure and enable learners to carry it out.

4.3. CS and Subjects.

The need for CS may vary with subjects. Certain subjects with high concentrations of low-frequency, high-specificity terms – science, for example – may need more CS for translating and explaining these concepts (Ndayipfukamiye 1994). Teachers are also likely to need to switch more with new concepts than with familiar ones, and more at an early stage in a learning sequence than at a revision stage (Ndayipfukamiye 1994).

5. THE VALUE OF CS TO LANGUAGE DEVELOPMENT.

Certain forms of CS may be good for L2 development. There is a debate within foreign language (FL) teaching about the value of CS. Some commentators and teachers (Macaro, 2001) are doubtful about CS into L1 because they presume that it can remove from learners the need to attend carefully to FL discourse and gradually develop their own internal FL system. Others maintain similarly that high exposure to the FL is important and that CS can reduce it. In the opposing camp (e.g. Auerbach, 1993) observers view the quality of learners' FL 'intake' as more important than the total exposure to FL 'input' and the quality of FL exposure as more important than the quantity. Both teachers and learners may thus usefully employ CS as a means of focussing learner attention on language and transforming input into intake. CS can also be useful for maintaining FL discourse where it may otherwise break down for lack of learners' understanding or ability to express themselves. Butzkamm (1998) refers to CS in this sense as a 'conversational lubricant'. CS may in particular (Macaro, 2001) be used to draw learner attention to the meanings of FL vocabulary items.

CS is also valuable for a learner's L1 development. It can raise the status of L1s by giving them a legitimate place in education and as a consequence, raise learners' self-esteem and perhaps strengthen their inclination to prolong their education (Cleghorn, 2005). It may also make links between home and school which may be broken by the use of a MoI which is not used in the home (Cleghorn, 2005). In addition, CS can expand the academic vocabulary of learners in their L1 (Brock-Utne, 2007). Paxton (2009) suggests that CS from L2 to L1 may be used as an important resource for building academic registers in African languages. Indeed it may have potential value in inducting learners into the academic variety of their L1 (Bunyi, 2005). Cognitive academic language proficiency – or CALP – in the L1 is widely accepted to be a foundation on which bilingual education is built: if it is developed in the L1, it can under favourable circumstances transfer to the L2 (Cummins, 2000). CS may be one way in which in African classrooms – where L1 CALP is often not well developed in initial L1-medium schooling (Heugh, 2006) – L1 can be used, and seen by learners to be used, for academic purposes.

It is also relevant to mention that in the world of L2-medium subject teaching elsewhere (e.g. in minority language education, Content and Language Integrated Learning in Europe and immersion education), a highly developed specialist pedagogy is used specifically to equip subject teachers to help learners working in L2 to engage in cognitively demanding activities with low levels of L2 ability (Clegg, 2001, 2005; Gibbons, 2006). It has the twofold aim of developing learners' subject knowledge at the same time as it increases the L2 ability which they need to deal with this subject knowledge. It enables teachers to amplify classroom meanings much more than is the case in conventional MoI-fluent subject teaching. They do this by using visuals in more complex ways, by using highly accessible forms of teacher-talk, by prompting and extending learner utterances and by using a specialist range of language-supportive task types for supporting listening, speaking, reading and writing within the subject which are often unfamiliar to teachers in MoI-fluent contexts.

Explicit L2-medium pedagogy is not widely used by subject teachers in African classrooms. Teachers are rarely guided by a pedagogy for bilingual education which initial teacher-education has taught them and education authorities promote (Clegg, 2005; Probyn, 2006; Alidou 2009).

Both teachers and researchers (Ndayipfukamiye 1994; Probyn 2005, 2006) comment that teachers have not been trained to use L1 in the L2-medium classroom. In addition, research into African education is fairly silent on the requirements of L2-medium subject pedagogy. Thus when African subject teachers code-switch to convey concepts, they may do so partly because they have no recourse to other means of facilitating comprehension or learner expression in L2, which a more appropriate form of teacher-education might have provided them with. Teacher education can easily accommodate the specialist skills of teaching learners with low ability in the MoI. Rubagumya et al (2010), for example, report that in a study in Tanzania within the framework of the EdQual project (2006), a short INSET programme aimed at improving the effectiveness of L2-medium subject teaching, was able – amongst other things – to reduce the extent to which teachers over-relied on CS to convey meanings and increase their use of alternative strategies.

6. LANGUAGE ALTERNATION AND EDUCATIONAL TALK.

The most decisive – and least researched – effect of patterns of language alternation in African classrooms is on the use of educational talk. In this section we will first outline the roles of educational talk in classrooms in general and then discuss the constraints placed on them within African schooling.

6.1. Educational uses of language.

Language in education theory assigns different value to different forms of classroom talk. Discussion focuses in particular on two types of talk: plenary teacher-led talk and exploratory talk which is associated with groups and pairs of learners, or with a specific style of teacher-guided interaction which facilitates expanded, elaborated, enquiry-driven learner responses. In contexts in which learners work in a second language, it seems initially to be more difficult to generate both types of talk. Firstly, learners are less secure, and less linguistically able to respond to teacher-elicitations in the public arena of the plenary classroom. Secondly, they are often not linguistically competent enough to engage in pair and group talk in L2. In Africa, where learners' ability in the MoI may be particularly limited, their chances of taking part in educational talk of any kind are therefore often low.

a) Teacher-led talk

Teacher-centred talk in plenary classrooms often takes a form which is conventional in schooling across the world. It is asymmetrical in the sense that it is controlled by the teacher who determines topics and respondents and evaluates responses. Teacher-utterances are frequent and of varying length; learner utterances are infrequent, narrowly distributed across the class and short. The conventional pattern of such talk is the three-part exchange known as IRF (Sinclair and Coulthard, 1976): Initiation (by the teacher), short Response (by the learner) and Feedback (by the teacher). IRF exchange structure has attracted criticism because it is said to focus on the transmission, as opposed to the construction of knowledge (Barnes, 1976), and because teacher questions are often said to be cognitively unchallenging (Hardman, 2008). However, it has also been recognised as having important pedagogical roles to play (Mercer and Dawes, 2008) and can be used to generate high learner participation, even in L2-medium classrooms such as in Africa (Probyn, 2006). Skilled teachers can also use it sensitively to facilitate longer responses by the learner and prompt them to elaborate their responses and extend their thinking (Mercer and Dawes, 2008); they may also use it to extend a train of thought in the class as a whole, as well as to enlarge the number of respondents. Thus teacher-led talk can, in good hands, display some of the characteristics of exploratory talk.

b) Exploratory talk

Exploratory talk (Barnes 1976, 2008) is what learners use when they explore new concepts, often in the less formal context of group activities. It is what learners use when they begin to talk about new concepts, often in the less formal context of pair- or group activities. It displays

incompleteness and uncertainty as learners try out new ideas. This is reflected on the surface of discourse in, for example, unfinished sentences, hesitations and expressions of tentativeness and is claimed to reflect the initial, hypothetical nature of developing concepts which are still under construction (Barnes, 1976). Exploratory talk is also dialogic in nature (Alexander, 2006): it is brought into being by interaction with an interlocutor. It can be cognitively demanding: it requires learners to take initiatives, produce longer utterances, listen, respond, argue, present and defend positions, achieve group consensus and, in some group activities, to produce a summarising report in front of the whole class. Because it requires learners to take risks, exposing lack of knowledge and floating new and incomplete ideas, it flourishes in mutually supportive conversational groups. It often takes place in teacher-less pairs or small groups, but can be usefully guided either by a task or by the facilitative – as opposed to authoritative – intervention of a teacher. Teacher-less group-work has the disadvantage that it can be directionless and thus have low learning value. However, Mercer and Dawes (2008) show how careful facilitative leadership by teachers of groups and plenary classes can also generate extended, challenging, enquiry-driven, exploratory responses from learners.

Within language in education theory this form of talk has come to occupy a crucial role in the development of learners' understanding of new concepts. Lessons are thought to gain value if they make space for it. It is thought to have its place towards the beginning of a learning sequence (Barnes, 2008), when learners are developing initial hypotheses about a new concept. As concepts develop more clarity and stability, learner-talk begins to approximate to academic discourse in that it uses more technical terms, more connections between thoughts and generally displays more formality. Specifically, it shifts closer to the discourse patterns of the academic genres which characterise the subject. Formal learner presentations in class represent the end point of a thinking process, what Barnes (2008) calls 'presentational talk'; this is an oral 'final draft' whose discourse features are carefully organised to show a connected sequence of thoughts, orientated to the requirements of an audience. It is one-way, planned, pre-constructed talk, as opposed to tentative, dialogic talk. As such it has many of the features of formal writing, and indeed it has become commonplace in language in education debate to talk about a 'mode continuum' (Gibbons, 2006) from exploratory to more formal talk and finally to writing, which reflects in discourse terms a natural route of conceptual development from initial encounter to established concepts. Teachers are encouraged to provide classroom experiences which allow for this conceptual and linguistic journey to take place and which guide, scaffold and channel it.

6.2. Educational uses of language in African classrooms.

The African classroom complicates this picture because learners are not fluent in the MoI. This has two main consequences. Firstly, learners may not be able to respond adequately to teacher-centred plenary talk either because they may not understand teacher initiations or because they are not able to respond to them in the MoI. Thus learner responses in IRF exchanges may be less frequent, shorter, less linguistically elaborate and more narrowly distributed across the class than in MoI-fluent classes. Secondly, as we have already discussed, exploratory talk in small groups takes place largely in the L1.

a) Teacher-led talk

Research records that learner participation in plenary interactions in African classrooms is often low (Prophet and Dow, 1994; Bunyi, 2005; Brock-Utne and Alidou, 2006): few learners speak in the plenary classroom and utterances are short (Setati et al, 2002; Bunyi, 2005, Hardman, 2010). This pattern of participation is found in education generally, whether in L1 or L2 (Sinclair and Coulthard, 1976; Alexander, 2000; Hardman, 2008). But it is exacerbated in African L2-medium classrooms. Here, learners are inhibited in what they say, firstly by normal reluctance to speak up in the plenary class, secondly by limited L2 ability – they may know what they want to say but cannot express it in L2 – and thirdly sometimes by sanctions on the use of L1 by learners (Arthur, 1996; Probyn, 2006). Thus they may thus say very little.

Paradoxically, sanctions both on learner CS in the plenary classroom and on L1-talk in groups and pairs may well mean that most learner-talk, however infrequent and limited, may be in L2.

A negative response by some teachers in African classrooms to learners' inability to engage in IRF plenary talk in L2 is to use it 'defensively'. In other words, teachers reduce to a minimum the linguistic and cognitive demands of the Response move. They use low-challenge questions and prompts and in particular incomplete sentences to which learners are invited to offer one-word completions (Bunyi, 2005; Arthur and Martin, 2006), and to which learners can respond without thinking too much about a concept or about how to express it in English. Most learners can respond and may indeed be encouraged to do so in chorus (Chick, 1996; Arthur and Martin, 2006). Hardman (2008) reports that in a Nigerian study, most F-moves were one-word in length, discouraging further exploration of a learner's response. Defensive use of IRF has the critical educational disadvantage of removing from plenary interaction an encounter by learners with what is new, cognitively challenging and difficult, because this may be beyond their L2 language ability; it avoids the making of meaning. But it has the superficial 'advantage' in the L2-medium classroom of avoiding learner error and the need for spontaneous complex explanations which teachers may find difficult (Cleghorn 1992) or which learners may not understand (Rubagumya, 2003). It also avoids silence or the absence of response, and sometimes the need to code-switch. Teachers' plenary interactions with the class have the character of a teacher-led monologue in which learners are invited to fill short, cognitively undemanding slots by demonstrating known concepts (Arthur and Martin, 2006), rather than having the character of a dialogue in which both sides feel free to pursue open-ended investigations. CS may also be said to be a defensive practice (Martin, 2005) if it gives learners access to meaning only at the word level in the L1, and avoids exploratory uses of language.

Defensive plenary talk is a practice in which both teachers and learners collude to preserve the public impression that lessons are progressing while concealing the fact that little learning is taking place. It is what Chick (1996) has called a 'safe' practice. 'Safe-talk' is common in L2-medium classrooms in different parts of the world (Hornberger and Chick, 2001) where the language and learning demands of working in a language in which learners have insufficient ability are too high for effective schooling to take place but where lessons need nevertheless to be seen to be accomplished.

To improve a learner's chances of responding in the L2-medium plenary classroom, the teacher needs to adjust the conventional IRF pattern. The teacher may code-switch during Initiation to help learners understand. They can encourage a learner response in the Response slot in L1 (Martin, 2005) or they may prompt and scaffold a Response in the MoI; they can also use these strategies to help learners elaborate on their response. IRF discourse patterns can without doubt be made to work in L2-medium classrooms, even without either teacher or learner CS, simply by careful questioning and prompting of responses. Probyn (2006) notably reports that in a survey she conducted the teacher who used the most teacher talk also generated the greatest learner participation. Teachers can also use the more careful and open style of facilitative orchestration of whole-class talk (outlined in 5.1b above) to foster L2-medium exploratory discourse and induct learners into using exploratory talk. Interestingly, Setati et al (2002) refer to a view voiced in debate about ESL learners that these teacher-guided exploratory exchanges, with the teacher acting as 'discourse guide' (Setati, 2005) in the L2 may sometimes be more useful to learners with low ability in the MoI than undirected and potentially aimless exploratory talk in L1-medium group-work. However, the capacity to adjust IRF exchange structure in these ways to the requirements of the L2-medium classroom requires much skill on the part of the teacher.

b) Exploratory talk

A second complication of the picture of L2-medium educational language use in Africa is that learners may not be able to engage in exploratory talk in the MoI because their language ability is too low. Pair and small group work can be linguistically demanding in the L2; thus it tends to take place – if at all – mainly in the L1 (Probyn 2006). In addition, group-work in general may be rare because of class size, noise and pressure to cover the curriculum, and because it may

contravene education policy on the use of L1. Thus opportunities for exploratory talk in either language may be scarce.

Opportunities for exploratory talk can be increased. Group-work talk in the L1 is being increasingly used in some African L2-medium contexts, e.g. South Africa (Setati et al, 2002), as its value becomes recognised. Group-work can also become a more bilingual endeavour. This occurs, for instance, if learners are engaging in the L1 with L2-medium texts, if teachers build L2 support in the group-work task they set, if when monitoring L1-medium group-work they interact with the group in the L2, or if learners' L2 ability is more developed (Moodley, 2007). Teachers can also encourage L2-medium reporting from groups in the plenary classroom: groups talk in L1 but summarise and report publicly in L2. Because this reporting makes high language demands, it often takes place in the L1. But if L2-medium reporting is carefully scaffolded by the teacher, it normally results in groups devoting some group-work time to the high-value exercise of preparing themselves by formulating bilingually how they will report in L2 the results of their L1-medium talk. However, these possibilities for expanding and 'bilingualising' the role of L1-medium exploratory talk in groups also require high pedagogical competence on the part of the teacher.

A further complication arising from the African classroom is that moving along the mode continuum from informal to formal talk involves crossing language boundaries (Setati et al 2002). Exploratory talk is normally in the L1; plenary talk is in the L2. As Setati et al show, the journey along the mode continuum from exploratory talk to formal talk and writing is therefore often incomplete: learners may do exploratory talk in L1, but need to jump across language boundaries to more formal public talk and writing in L2. This, as the authors point out, is the crucial dilemma of the bilingual classroom in which learners' ability in the MoI is low: teachers feel the need to facilitate understanding by encouraging more informal L1 use through teacher and learner CS in the plenary classroom and through L1-medium pair and group-work. On the other hand, however, they are compelled to move lessons in the opposite direction towards more formal L2 use so that they induct their learners into the genres of academic talk and writing in which the subject is expressed, textbooks are written and ultimately examinations are conducted.

Bridges between exploratory L1-medium peer talk and more formal L2-medium discourse-specific talk and writing can be built into African classrooms. Teachers may, for example, move learners from informal exploratory L1 talk in groups to more formal discourse-specific talk in L1 by teacher-intervention in group-work: teachers guide L1-medium talk through the use of supportive group-work tasks which move learners towards more formal subject-specific talk; in addition they may use their own short L1-medium interactions with groups as they monitor them, to help them move towards more formal uses of language. They can also train learners to work in groups: groups engage in L1-medium exploratory talk, but learn over time to guide their talk by learning the ground rules of effective group-work, such as chairing, time-keeping and scribing.

Teachers can also move learners from informal exploratory talk in L1 to more formal discourse-specific talk in L2. They can do this by getting learners to report to the class in L2 on group-work which they have conducted in L1. They can also use a facilitative and extending style of talk direction in the plenary classroom, as well as CS, to enable learners to make longer, more elaborate and more exploratory contributions to plenary teacher-centred talk (Echevarria and Graves, 1998; Hardman, 2008, Mercer and Dawes, 2008) and to increase the distribution of learner responses (Arthur and Martin, 2006).

However, if, in MoI-fluent classrooms, teachers have to think carefully about stimulating and combining formal and informal uses of talk and writing, to do this in L2-medium classrooms where levels of learner L2 ability are low is much more demanding. The skills which teachers need to move in and out of L1- and L2-medium as well as informal and formal discourse and to reconcile the opposites of the bilingual dilemma are considerable. As we point out below, teacher-education must improve if it is to enable teachers to do this

7. ATTITUDES TO CS.

The occurrence of CS is very much affected by the attitudes of stakeholders in education. In many contexts, including Africa, negative attitudes prevail (Adendorff, 1993; Ferguson, 2003; Martin, 2005; Arthur, 1996). This contrasts starkly with the acceptance of CS in multilingual communities as a normal strategy for negotiating meaning amongst individuals who speak more than one language. In school, CS may be considered inappropriate, officially frowned upon or banned outright. Explicit justifications for this are hard to find. A negative view of classroom CS may have to do with views within the community as to the differential status of languages in society and their allocation to different purposes: L1s may be felt not to have the social status required of a medium of education (Ferguson, 2003), while people may similarly avoid using L2s for informal social purposes in the community. Canagarajah (1995) points out that CS in a multilingual community outside the school is governed by certain social practices which will influence CS in school. In the Tamil-speaking community in Sri Lanka which he describes, Tamil may be preferred to signal interactions which are unofficial and personal while English may express formality and detachment. Consequently, classroom CS into Tamil may express vernacular solidarity as well as links between school on the one hand and home and culture on the other. English, by contrast, remains the language of textbook and curriculum.

A particularly powerful influence may be the idea that a European L2 simply has an official status as MoI and as such should not be compounded by other languages which do not have this status. Arthur (1995), for example, observes a distinction between the 'on-stage', formal role of English in Botswanan classrooms and the 'off-stage', informal role of Sestwana. This view may also be reinforced by a normally unstated assumption – unsupported by theory (Auerbach, 1993; Martin, 2005) – that maximum L2 development within an L2-medium system requires maximum exposure to L2 in the lesson. Setati et al (2002), for instance, report rural primary teachers in South Africa taking the view that classroom CS should be avoided since the classroom was the only source of L2 exposure for their learners. CS, as already mentioned, is sometimes felt to be permissible by teachers but not by learners. Bunyi (2005) notes teacher disapproval of learner CS; Alidou and Brock-Utne (2006) report teachers using punitive measures to exclude it. Similarly a study by McGlynn and Hardman (2009) in the Gambia shows that teachers have rights to code-switch in their classrooms, despite an English-only policy, but learners do not. Arthur and Martin (2006), in their comparison of classroom processes in Brunei and Botswana report that while in Brunei, teachers and learners code-switch regularly, Botswanan education policy requires that only teachers have this privilege, a fact which Arthur (1996) notes much reduces learners' ability to engage meaningfully with the curriculum.

Whatever the underlying reason, attitudes against CS are often entrenched and teachers admit a deal of unease about using it (Alidou and Brock-Utne, 2006; Probyn 2006). The unease sometimes has its source in teacher beliefs; but CS is also regularly condemned by education authorities – a policy which may be enforced by inspection. Cleghorn (2005) reports an all-English national policy in Kenya (despite which much CS occurred). Brock-Utne and Holmarsdottir, (2003) record the condemnation of CS by Tanzanian education authorities. However, individual teachers may feel that extensive use of L1 is necessary for learning: Probyn (2006) records one South African teacher as taking the view that long stretches of L1-medium teacher talk were important for learners to understand. Teachers' views can also change. Setati et al (2002) in their longitudinal study of South African classrooms note an increase in the incidence of both L1-medium group-work and teacher- and learner-CS in response to a slackening of official disapproval and increasing teacher-awareness through INSET. They report teachers as recognising, despite a feeling that they should not code-switch, that teacher-CS is necessary to help learners understand and learner-CS to help them respond. This somewhat split view of teachers – that CS is not really acceptable, but necessary for good learning – is commonly observed (Brock-Utne and Holmarsdottir, 2003; Brock-Utne, 2005). Sometimes official policy which condemns CS may be relaxed in cases where it is unavoidable, such as with younger learners (Merritt et al, 1992).

8. THE VALUE OF LANGUAGE ALTERNATION IN THE CLASSROOM.

It seems to us that to ask teachers or learners who share two languages to avoid using them in the classroom is to ask them to avoid something which is a natural language practice in their community and can enhance their ability to learn. If in addition the ability of learners in the MoI is low, outlawing CS reduces their capacity to understand and to use talk for learning and their teacher's ability to use talk for teaching: group talk becomes rare, learner talk in plenary interaction limited and both teacher and learners struggle to make meaning in the classroom.

CS is pedagogically useful. This paper highlights important functions of teacher CS. Firstly teachers need CS for explaining and elaborating on concepts. In African classrooms this is possibly an indispensable strategy, without which limited learner ability in the MoI would make it difficult to provide an acceptable degree of access to the curriculum. Secondly, CS may also increase classroom participation. Thirdly CS is useful for affective and social purposes: teachers need to establish good classroom relationships; for most teachers L1 is the best medium for maintaining the class solidarity which underpins effective learning. Fourthly CS is useful for classroom management purposes to ensure the smooth running of the lesson and for maintaining and sustaining pace and interest. And lastly teachers need to use the L1 to make connections between new conceptual material and the local context and culture of learners.

It is important, however, to differentiate between aspects of the classroom context in which CS occurs; as Ferguson (2003) points out, the literature does not do this very well and tends to treat it as an undifferentiated phenomenon. CS is likely to vary in its usefulness depending on a range of conditions. Learner age, for example, must make a difference: younger learners will switch more often and younger learners with initial levels of L2 ability will need teachers to switch more often. Learner language ability is also a fundamental factor: learners with low ability in the MoI will need more teacher CS for comprehension purposes and will often need to switch more often themselves if they are to engage orally in learning. Teachers are likely to need to switch more with new concepts or at an early stage in a learning sequence than with familiar concepts or at a revision stage (Ndayipfukamiye, 1994). Certain subjects with high concentrations of low-frequency, high-specificity terms may need more CS for translating and explaining these concepts (Ndayipfukamiye, 1994).

In addition, we should distinguish types and purposes of CS. Several types of short switch emerge from the literature as useful for conveying concepts. Teachers can convey the meaning of an L2 concept efficiently and without wasting time when they insert a good L1 equivalent into an L2 utterance, or elicit it from learners. If no good equivalent exists, they can explain in L1, if they can see that a quick and effective explanation is easy to give. They can also switch to L1 in response to learner incomprehension, to explain, clarify, exemplify or further qualify, and then switch back to L2. They can do the same in order to make a link to a local concept available only in L1. All these switches may have the added positive effects of signalling importance, maintaining motivation, appealing to a common context and maintaining class solidarity. Teachers need, however, to avoid over-using CS when they could use other means of conveying meanings – such as exemplification and explanation in L2 and, especially, visuals of all kinds. Rubagumya et al (2010) report that in a study in Tanzania within the framework of the EdQual project (2006), aimed at improving the effectiveness of L2-medium subject teaching, an INSET programme was able to reduce the extent to which teachers over-relied on CS to convey meanings and increase their use of alternative strategies.

Learners also need to code-switch in their interactions with teachers in the plenary classroom to express knowledge which they cannot express in the MoI. Teachers can help them if they allow L1 responses or L1 completions of an aborted response: learners need to be able to contribute to plenary talk in whatever language they can. Teachers can also help learners to give plenary talk an exploratory value when they extend plenary responses by encouraging the learner to further qualify and elaborate on what they have said, or by eliciting such extensions from others, either in L1 or L2. They may also fruitfully take up a learner L1 response and repeat or extend it in L2, or invite another learner to do so, thereby acknowledging the learner, confirming the concept, marking it as important, returning to the MoI, but also at the same time

accomplishing a move known in language teaching as a 'recast' and recognised as developing learners' L2 ability. Here also, however, teachers can be aware that they can extend plenary talk in this way by means other than CS. They can use a variety of L2-medium question types: questions which require linguistically short and simple answers (such as one-word or yes/no responses) while remaining cognitively demanding; thus appealing to the learner who is good at the subject but less good at the language. They can also ask questions which are cognitively easier, but require linguistically more extensive and complex responses, thus giving more L2 able learners a chance to express – and others to hear – extended L2 responses. They can also prompt responses and response completions, by supplying crucial parts of the sentence and thus enabling learners to make responses which they might otherwise not have ventured. These forms of teacher elicitation can be used together with CS to facilitate extended learner responses within a framework of exploratory plenary talk at different levels of language and cognitive ability, in two languages.

Learners also need to engage in exploratory talk in their L1 in pairs and groups. Indeed they need many more opportunities to do this than they seem at present to be getting in many African classrooms. In this respect, official prohibitions on the use of L1 by learners either as CS in plenary interactions or as group-work seriously undermine their capacity to learn and reinforce the cognitive restrictions under which they already labour by learning in a L2 in which their ability is low. L1-medium group-work can be guided by teacher-supplied tasks and learners can with time and practice develop complex skills of setting, pursuing, monitoring and achieving group objectives. L2-medium reporting of group-work, with the support of the teacher, has several cognitive and linguistic values: it ensures that learners do some bilingual group talking about the outcomes of their task in preparation for reporting; it requires learners to engage in the cognitively high-value exercise of summarising and to do so bilingually, and it requires them to use a more organised presentational form of talk to express this summary to the whole class.

These are ways in which teachers and learners can use language alternation in considered, and what some (Moodley, 2007; Lin and Man, 2009) have called 'judicious' or 'strategic' ways to enhance learning. On the other hand, it is also likely that certain uses of CS in specific contexts are not useful, or may lose value when used excessively. Research evidence of this is rare. One could speculate, however, that L1-repetition of L2 concepts, while it may be useful for reinforcing concepts, may become boring (Merritt et al, 1992) and if over-used, take up too much lesson time. The same can be said for the translation version of teacher CS: Brock-Utne (2004) suggests that it can halve the time available for learning. There is also evidence (Butzkamm, 1998) that regular, predictable L1-reformulation and explanation may reduce learner's attention to L2-medium teacher-talk: as Bunyi (2005) notes in Kenya, they can rely on key information being presented again in L1 and do not need to work so hard to understand L2. Teachers who use CS defensively – because they are too insecure in their own L2 ability or too anxious that learners will not understand them – may not be exploiting its pedagogical value. In addition, the sheer amount of CS in any lesson must at some point undermine its claim to be an L2-medium lesson. Likewise, one could say of L1-medium group-work that it loses learning value if it is directionless, cognitively unchallenging, generates no clear outcomes and is not at some point expressed bilingually. Some commentators express a general view that CS with low-L2 ability learners (Mwinsheikhe, 2009) may be harmful to education. We do not know enough about potential negative effects of CS in these contexts and research needs to help us find out more.

9. CONCLUSION.

Teachers in African L2-medium classrooms are using two languages, but they are often doing so undercover. They are using a wide range of pedagogically valuable CS practices. They are also largely avoiding other uses of learner L1, especially group and pair activities. Both these forms of L1-medium talk in the L2-medium classroom are educationally valuable. In Africa, however, we suggest that they are indispensable. Sub-Saharan Africa is more dependent than most other parts of the world else on education in languages in which learners are not fluent. These limited levels of learner academic language proficiency ability in both African and European languages depress school achievement and are exacerbated by low resourcing and

low-SES family backgrounds, within a framework of short initial L1-medium and continuing L2-medium schooling whose effectiveness is in doubt. In this environment, teachers and learners need to use all the linguistic means at their disposal to make learning more effective.

Outside school, in multilingual communities, CS is a high-value skill. It is linguistic capital (Kamwangamalu 2010) which users employ naturally to achieve social goals. In other parts of the world, it is a feature of successful bilingual education, where learners and teachers see it as a way of making the most of one's language resources in order to learn. In this paper we have attempted to describe some of the potential ways in which CS and L1-medium learner talk can do this with respect to Africa. We do not know enough about how L1 use in L2-medium classrooms with limited L2 ability learners, anywhere in the world, helps teachers teach and learners learn (Ferguson, 2003). We need to know more about the detail of effective practices, to document them, recognise them and disseminate their use. Further research is needed to help teachers, education authorities and teacher education institutions to gain a clearer picture of how to exploit bilingualism in the classroom in these difficult conditions (Ferguson, 2003). As is common in educational development, many of these practices will be already in use in African schools, generated by ordinary teachers, consciously or not, simply trying things out (Probyn, 2006); we need research to locate them, assess them and describe them. Other practices need to be developed by research, introduced into schools and teacher-education and fine-tuned. In this way African bilingual education can change from being a set of creative but spontaneous, inexplicit and unformulated practices developed unconsciously by teachers, to being a precise, reliable, effective and coherent professional strategy, informed by theory, which teachers can learn in teacher-education and use with confidence in the classroom. The use of two languages can then achieve explicit strategic status at the heart of the good practice (Ndayipfukamiye, 1994) which is taught to teachers and reinforced by education authorities and inspection regimes.

Teaching in an African school in a European language which learners do not understand well can grossly undermine what a good teacher tries to do. Teachers therefore need solid professional skills to counter the fact of sheer silence and incomprehension on the part of learners. One point we have been at pains to make in this paper is that to teach effectively using two languages is not easy. Teachers cannot simply pick it up. The fundament of a teacher-education course in Africa must therefore be a pedagogy which is closely calibrated to the conditions in African classrooms and which prepares teachers to use the wide range of strategies which they need in order to support their learners working in two languages (Cleghorn 1992; Adendorff 1993; Ferguson 2003, 2006; Probyn 2006). Bilingual pedagogy is in de facto operation in African schools; but it needs to be better researched, refined and adjusted to the requirements of African education, embellished by practices from elsewhere in the world, introduced into initial teacher-education and promoted by education authorities.

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