PRINCIPLES AND PROCEDURES FOR THE ASSESSMENT OF LANGUAGE PROFICIENCY OF BILINGUAL CHILDREN WITHIN THE SOUTH AFRICAN CONTEXT: SOME PRELIMINARY DATA.

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The process of becoming bilingual is complex and there are many different ways in which individuals achieve bi - or multilingualism. The outcome of early exposure to more than one language is determined by an interaction between input variables, linguistic variables and individual learner variables. While I will discuss these variables as they relate to what we need to know about communicatively disordered bilingual clients, the main focus of this paper is on the effects of input on second language acquisition by young children.

In the assessment of any bilingual child, it is important to establish at the outset whether the situation is one of first or second language bilingualism (de Houwer, 1994). In the former, the two languages are acquired simultaneously from birth, and in the latter, the acquisition of the second language is sequential to the acquisition of the first, after the age of three. This age criterion is generally agreed upon in the literature, because most normally developing children have achieved basic linguistic competence by then (Kessler, 1984; Romaine, 1989; MacLaughlin, 1978; Genesee,1988.)

Although there are an increasing number of children whose parents use two or more languages from birth, I will focus on second language bilingualism in this paper, since this is the way in which the majority of South African children become bilingual. They are generally only seriously exposed to a second or third language, which is English in the current South African context, when they enter pre- school, or in many cases, Grade 1 (sub A), as well as later in the school system. How does the child deal with this task of acquiring another language? How long does it take to become proficient in the language of the school?

The individual characteristics of children may be highly relevant to this question. The child's overall linguistic competence in the L1 is, according to the developmental interdependence hypothesis of Cummins (1978), a significant determinant in the acquisition of the L2. Any limitations that prevent the learning of the first language will also affect the learning of the second, and conversely, a high level of linguistic competence in the first language will facilitate the acquisition of the second. Children who have achieved a level of language development commensurate with their chronological age should theoretically not experience difficulties in acquiring a second language, but the child's inherent language learning aptitude will also contribute. If it is true that linguistic intelligence is a "relatively autonomous intellectual competence" (Gardner,1983, p8) children who have an aptitude for language learning, and have been exposed to a regular linguistic environment, will have acquired their first language with remarkable ease and fluency and will excel at the acquisition of the second language. Such children are well known to all of us.

What exactly constitutes language learning aptitude has not been clearly defined, but if we were to understand it better we may be able to predict which children will be more successful at the learning of languages. At present we need to rely on our assessment

of how well the child has mastered the first language. This is not a simple matter since we have virtually no tests in the languages spoken by the majority of South Africans and very few qualified personnel to assess these languages accurately. It is generally agreed in the literature (Damico, Oller and Storey, 1983; Fey and Leonard,1983; Gallagher and Prutting,1983) that in the absence of these standardised instruments, the best measure of L1 function is the use of pragmatic criteria, such as the Bilingual Oral Language Development Questionnaire, suggested by Mattes and Omark (1984) and expanded slightly for ease of administration (Jordaan, 1993) which can be administered to parents or teachers (Appendix 1). Although such a measure may not be sensitive enough to detect subtle language problems, and will not identify which children are better language learners, it will identify children who are at risk and who should be considered for further assessment, before being exposed to the second language. The communicative behaviours on this questionnaire, should be exhibited by most three year olds and definetly by all children about to start school (Dore, 1975; Halliday,1975; Tough,1977). Teacher interviews and ratings of vocabulary, morpho - syntax and overall communicative ability have also been found to be reliable indicators of language functioning in both the first and second language (Jordaan, 1993) (see appendix 2). In assessing the first language it is important also to distinguish between basic interpersonal communication skills and cognitive academic language proficiency (Cummins,1991). The latter is linked closely to metalinguistic awareness (Tunmer and Herriman, 1984). Children who have developed metalinguistic awareness through the acquisition of the first language may be better at the acquisition of the second language. There are many simple tasks that can be used to asses metalinguistic awareness, and these are easily translatable. The corollary to this is that there have been consistent findings in the literature that language awareness is enhanced in children who have been exposed to two languages, the only provision being that

both languages are allowed to develop as languages of thought and and expression (Diaz and Klingler, 1991). The fate of the first language in second language bilingual situations is of paramount importance to speech language therapists in the management of bilingual children. If a first language is not permitted to continue developing, and the second language is learned to replace the first, which is then no longer used and subsequently forgotten, a language problem may be created because the child is now not proficient in either language, with implications for academic success. This problem is amplified if the child is language impaired because he is now faced with the formidable task of acquiring yet another language despite already limited language learning capacity. The use of the first language for academic purposes is equally affected, although it seems that educators have chosen to ignore this fact. Continued use of the first language for communicative purposes only is not sufficient for the child to derive the benefits of the bilingual situation. The use of the first language should be encouraged in the acquisition of academic concepts and literacy. This is an important aspect of managing all bilingual children. In the final analysis, the operating principle in the assessment and management of bilinguals is very simply: pay attention to BOTH languages.

Other individual variables that contribute to the outcome of the second language learning process include: motivation, which is determined in part by attitudes; personality; and cognitive style.

Attitudes and Motivation: In one of the earliest statements on motivation in second language learning, Gardner and Lambert (1959) suggested that an individual's motivation to learn a language is controlled by his attitudes towards the group who speak the language, as well as attitudes related to the practical usefulness of learning the language. It is not certain whether young children understand the need to learn a language for its use and Strong (1984) has shown that where young children are concerned,

Integrative motivation (the desire to be part of the group who speak the language) is the result and not the initial impetus for learning a second language. Motivation in children can possibly be increased if they enjoy the experience of learning a new language. This is where, I believe, speech language therapists contribute meaningfully to facilitating second language acquisition in young children, because these professionals understand the art of providing focused language stimulation in a natural, fun filled way. This increases the children's motivation to engage in the learning process, which leads to increased proficiency in the second language and thus indirectly to increased exposure to the target language due to increased motivation to communicate with members of the group who speak the language.

Personality: Guiora (1983) explains that the importance of personality factors in second language acquisition arises from the fact that language is not just a means of communicating but also a basic method of self representation. Learning a second language involves confronting oneself as a different person. Some children may be more sensitive to this than others. It seems logical to assume that more confident, assertive and sociable children will engage in social interactions more easily, leading to more practise in using the target language and thus earlier proficiency. Beebe (1980) identified the characteristic of risk taking as important, since speaking a second language involves taking the risk of making errors in conversation. A consistent finding in the research on second language acquisition has been that anxiety interferes with the process (Spolsky,1989) and it is thus imperative that children are allowed to learn a new language in a non threatening and caring environment. This has implications for the current education system, which often demands that children acquire a second language while simultaneously using the language to learn new academic concepts.

Cognitive Style: This refers to the manner in which information is perceived, conceptualized, organised and recalled (Ellis, 1985),

and each person has a more or less consistent mode of cognitive functioning. Where second language acquisition is concerned, the dimension of cognitive style that is most frequently cited is that of field dependence (Ellis, 1985). Field dependence is characterised by a wholistic, socially sensitive approach to learning and field dependent learners are more likely to benefit from natural, context embedded language learning situations. Field indepedent learners on the other hand are more analytic, less socially aware and they are more likely to benefit from classroom instruction in the second language. It is interesting that this dichotomy is mirrored in the research on early first language acquisition (eg. Bates, 1976; and Nelson, 1974), where differences have been found between children who acquire language in a more object oriented versus more socially oriented way.

While it is very difficult to quantify the individual characteristics discussed above for assessment purposes, speech language therapists need to be aware of the variables that may account for the wide variation sometimes seen in the rate of second language acquisition.

By far the most significant variables in bilingual acquisition are the input variables. While monolingual acquisition is more robust, and less sensitive to input, bilingual acquisition is highly dependent on differences in the quality and amount of input in each language (Haynes and Schulman, 1994; de Houwer, 1994). The assessment of bilingual children should involve a careful estimate of the extent of exposure to each language since this will have a significant effect on the proficiency in each language. To illustrate and substantiate this basic hypothesis the results of a study on second language bilinguals acquiring English as their second language will be presented.

Two groups of normally developing bilingual and one group of monolingual preschoolers were assessed through the elicitation and

analysis of a spontaneous language sample according to the Profile in Lexical Semantics (P.I.S.M.- L) (Crystal, 1982) to assess vocabulary proficiency, and the Language Assessment Remediation and Screening Procedure (L.A.R.S.P)(Crystal, Fletcher and Garman, 1989) to assess morpho - syntactic proficiency. The subject characteristics as well as the measures used to ensure normal functioning in the L1 are reflected in Tables 1 and 2.

TABLE 1 SUBJECTS

BILINGUALS	BILINGUALS	MONOLINGUALS
LIMITED EXPOSURE TO ENGLISH (No English at home or less than 1 year attendance at English pre school or both)	EXTENSIVE EXPOSURE TO ENGLISH (English spoken at home or 1 year attendance at English pre school or both)	ONLY ENGLISH
n = 15	n = 15	n = 10
Mean Age = 4.3yrs	Mean Age = 4.8yrs	Mean age = 4.4 yrs

TABLE 2. SELECTION PROCEDURES

1.PARENT INTERVIEW to ensure that children used a variety of language functions and had a well developed vocabulary and syntax in the L1
2.CASE HISTORY QUESTIONNAIRE to ensure no risk factors for language impairment
3.TEACHER INTERVIEW to ensure age appropriate cognitive and social skills
4.TEST OF NON VERBAL INTELLIGENCE (Griffiths, 1984)
5.HEARING TEST

RESULTS

The results of the P.R.I.S.M. - L and L.A.R.S.P analyses can be seen in figures 1 - 4 and table 3.

An analysis of variance and Duncan's multiple range test revealed that the amount of exposure to English was a significant determinant of the number of different types of grammatical function words (minor types), content words (major types) and semantic categories and sub categories (fields and sub fields), represented in the samples. The English speaking group had a more varied vocabulary as seen in their higher type token ratio for major (content) words. All groups displayed a close to optimal minor:major token ratio of 1,5 (Crystal,1982). The acquisition of English vocabulary is thus dependent on exposure to the language, but the bilingual children still use fewer English vocabulary items than their monolingual peers. This does not mean that they have a vocabulary deficit.

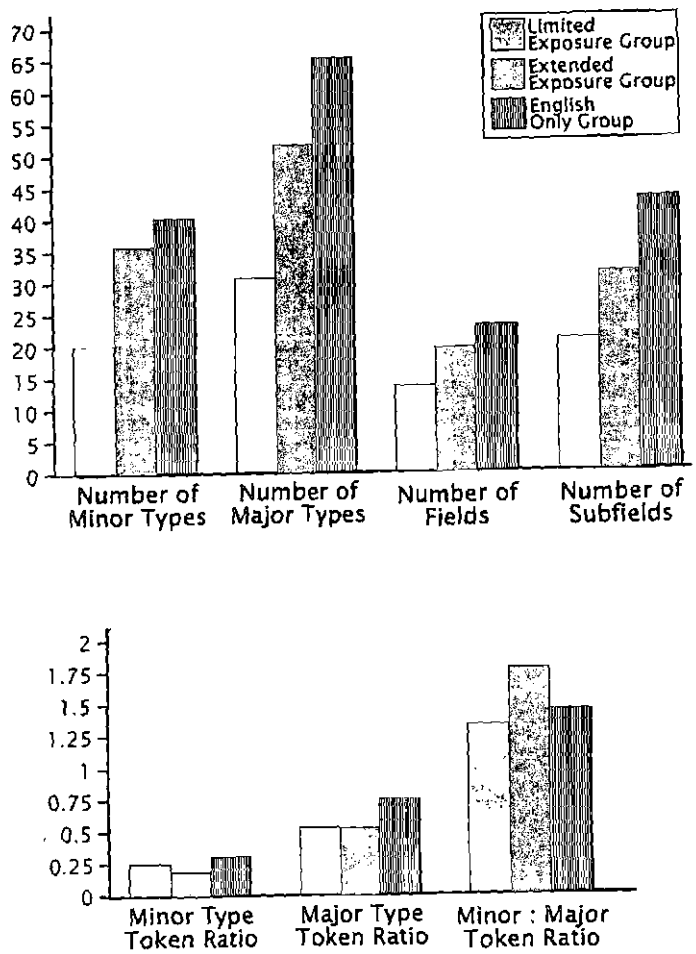

Figure 1. Group Means for each of the P.R.I.S.M - L Measures.

Abudarham (1995) suggests that the following measures be used to gauge the vocabulary of bilingual children:

1. Conceptual vocabulary: the number of words known, regardless of the language in which they are known;
2. L1 lexicon: number of words known in the L1
3. L2 lexicon: the number of words known in the L2 and

If these measures are used it should be apparent that bilingual children in fact have a larger vocabulary than monolinguals.

4. Bilinguality: the number of words known in both languages.

The results of the L.A.R.S.P analysis (see Table 3 and figure 2) revealed that syntactic complexity increases as exposure to English increases. With consistent exposure to English over time, pre schoolers reach the same level of development as monolinguals. As evidenced by the high ratio of spontaneous utterances to responses (1,28) within the sampling context of this study, which was a picture description and a personal narrative, the second language learners spoke freely and volunteered a substantial amount of spontaneous language.

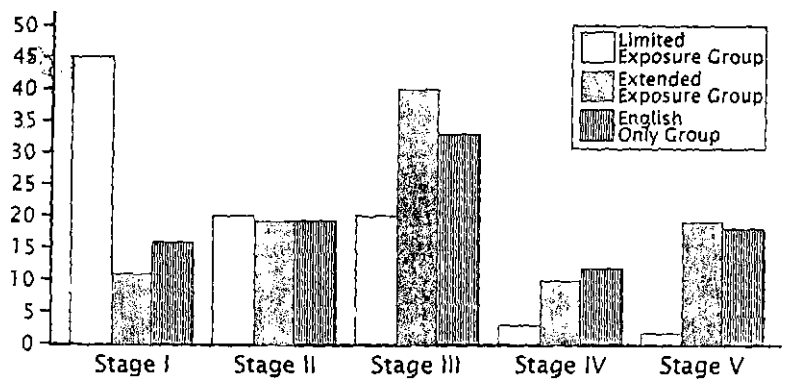

Figure 2. Average Proportional Representation (in %) of Clause Structures at Each Stage of the L.A.R.S.P. profile by Each Group.

TABEL 3 GROUP MEANS ON THE SUMMARY MEASURES DERIVED FROM THE L.A.R.S.P PROFILES

	LIMITED EXPOSURE GROUP	EXTENDED EXPOSURE GROUP	ENGLISH ONLY GROUP
MEAN SENTENCE LENGTH	3,67	5,49	6,15
RATIO OF SPONTANEOUS UTTERANCES TO RESPONSES	0,21	1,28	0,31
PROPORTION OF CLAUSE STRUCTURES THAT WERE EXPANDED	62%	100%	88%

However, there were also interesting differences between the bilinguals and monolinguals particularly with regard to development of the verb phrase and the error categories (see figures 3 and 4), clearly illustrating the effect of linguistic variables on the second language acquisition process. The monolingual English group used similar proportions of the different verb phrase components represented on the L.A.R.S.P. profile, while the second language learners used predominantly two types of verb phrase components, namely, the auxiliaries and copulas. This phenomenon, whereby second language learners tend to rely on a limited number of structure types, is well documented in the literature (Schachter,1974; Ellis, 1985; Hakuta, 1986).

Except for errors in the use of pronouns, the bilingual children made the same category of error as the monolinguals, only more often. However, as exposure to English increases, there is a

reduction in the number of determiner and preposition errors, which reflects developmental progression.It is possible that at least some of the error categories were due to transfer from the L1. The high proportion of preposition errors, especially in the group of children with limited exposure to English, may have been the result of the limited range of prepositions that exist in the African languages, causing second language learners to experience difficulty with the number of contrasts expressed by prepositions in English (Suzman, 1992). Determiners may also present problems because of their lack of lexical representation in the African languages. However, the effect of developmental processing cannot be disregarded since most of the error categories appear in the language samples of the monolinguals as well. Further analysis of errors would possibly clarify this issue.

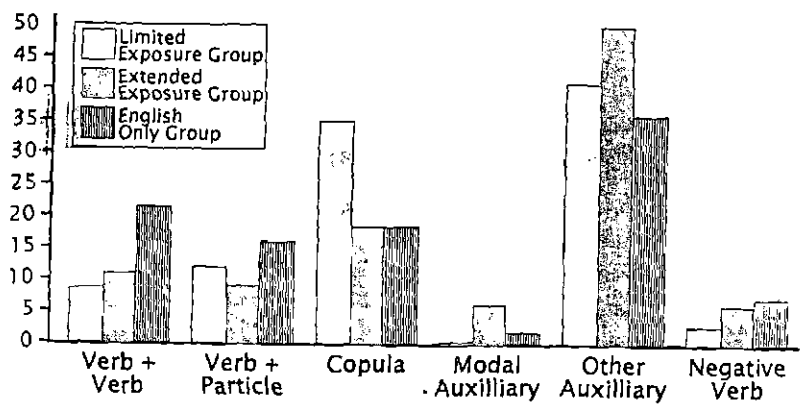

Figure 3 Average Proportional Representation (in %) of Verb Phrase Components in the Samples of the Three Groups.

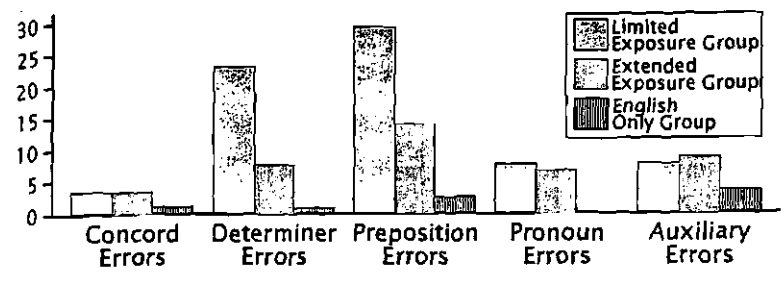

Figure 4. Group Means Reflecting the Proportion (in %) of each Structure Type on which Errors were made.

It would appear that the second language bilinguals in this study who had attended an English pre school for at least a year and/or spoke some English at home, were on a par with their monololingual peers, although their vocabulary was perhaps not quite as varied and they were still making a number of syntactic errors. Certainly they showed rapid acquisition of syntactic complexity, and confirm that where children have normal language acquisition capability, they acquire languages with relative ease. When language learning abilities are less well developed as in the case of language impaired children, this may not be so, but it remains to be empirically demonstrated that language impaired children have more difficulty acquiring two languages than one. We know that they will find it as difficult but is it more difficult? Stated differently, do bilingual language impaired children have significantly more problems than monolingual language impaired children? It is

possible that the answer to this question is more complex than our own clinical intuition would have us believe. The severity and type of language impairment would need to be considered, as well as the various input and linguistic variables applicable in any given case. For example, it has been shown that language impaired children acquiring Italian have less difficulty with morphology than their English speaking counterparts because Italian has a regular and consistent morphology as opposed to the sparse, irregular morhology of English (Leonard,1992). This regular, consistent type of morphology also characterises the African languages, and it is possible that becoming bilingual in these languages facilitates this aspect of the acquisition process for language impaired children. This question remains wide open to further research.

There was no evidence of code mixing in the language samples of the bilingual children in the study described above, mainly because they were interacting with their monolingual teacher, and as De Houwer (1994) points out, children are sensitive to the linguistic status of the interlocutor from an early age. When assessing bilingual children one should nonetheless try to establish whether the amount of code mixing in their speech is proportional to the amount of code mixing in the language input that they are exposed to. De Houwer (1994) suggests that the amount of code mixing in the input can be represented on a continuum with total separation in the input on one end and total lack of separation on the other end. It is possible that language impaired children code mix more, or do so inappropriately. This also remains to be confirmed through further research.

Furthermore, although it was not possible to separate the effects of native speaker versus non native speaker input in the study described above, it is advisable that this input variable be

considered in the assessment process. Second language learners who are exposed to predominantly non native speaker input may demonstrate a number of characteristics that are related to the input they receive. These include: phonological representation errors due to different pronunciations (an entire group of std 6 pupils were recently confused by the teachers' use of the word "burnt" which they interpreted as "bent" , since this is the way it is pronounced by non native speakers); limited vocabulary for words that have only a single lexical representation in the L1 (use of the word "hat" for all head gear such as helmets, caps, etc) and perpetuation of syntactic errors (eg. non use of third person singular agreement in English by Afrikaans speakers).

In conclusion, I would like to suggest that the following principles be adhered to when bilinguals are assessed.

1. Asses both languages. A communication disorder only exists if it is evident in both languages.

2. Age related criteria cannot be used in the assessment of bilinguals. The respective proficiency in each language should be considered in relation to the amount and type of exposure to and input in the languages.

3. As was demonstrated through the use of the linguistic profiles in the study discussed above, most assessment procedures are applicable to the assessment of bilinguals or second language learners, provided they are used in accordance with 2) above and they do not contain culturally inappropriate items.

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APPENDIX 1

BILINGUAL ORAL LANGUAGE DEVELOPMENT (B.O.L.D.)

Please tick the appropriate column if the child displays the communicative behaviour in that particular language.

	Communication Behaviour	L1	L2
1	The child comments on personal actions while these are happening, eg. "I'm riding fast".		
2	The child comments on the actions of others, eg. "He broke the pencil".		
3	The child is able to give an accurate description of his personal experience , eg. "I saw the animals at the zoo".		
4	The child describes a sequence of events in the order in which they occurred. eg. I went to school. Then we went to the doctor. We went to the chemist to get medicine.		
5	The child allows the person he is communicating with to speak and is able to listen without interrupting...		
6	The child follows directions eg. Tell your brother to come home and then go and wash your hands.		
7	The child starts conversations with adults and other children.		
8	The child takes turns during conversation. eg. Parents says: There was an accident on the main road. Child says: What happened?		
9	The child is able to talk about a topic of discussion over several sentences during a conversation.		
10	The child answers (responds) appropriately to simple questions. eg. Parent: Who puts out fires? Child: Firemen.		
11	The child uses language to get the attention of others. eg. Mommy, can I ask you something?		

12	The child asks questions to obtain information about people, actions and events. eg. Who came to our house last night, Mommy?		
13	The child uses language to tell others what to do. eg. Daniel, please pass me the water.		
14	The child asks for clarification when he doesn't understand what others have said. eg. I don't know what that is?		
15	The child can inform others of his personal needs, i.e. can tell what he wants. eg. I want to go to the toilet. I want the ball.		
16	The child can express feelings such as joy, fear and anger, using language. eg. "I'm cross with you".		
17	The child describes plans for events that will take place in the future. eg. "I'm going to build a house".		
18	The child expresses personal opinions and can provide a logical reason for his opinion. eg. "I don't like dogs, they bite".		
19	The child describes the solution to a problem. eg. "Put a plaster on".		
20	The child expresses imagination. eg. "I'm flying like an aeroplane".		
21	The child knows the names of most common objects and events. eg. dog, table, party.		
22	The child greets people appropriately when he comes or goes. eg. Hi! Bye!		

APPENDIX 2

TEACHERS' RATINGS OF PROFICIENCY

Please rate the children in your group on the rating scale below by placing an X on the relevant point on the scale

KEY

0-1 The child use only a few words correctly in the language

1-2 The child understands and uses the words used regularly at school

2-3 The child understands and uses words related to experiences outside the school environment

3-4 The child has a large vocabulary and understands most of what is said to him/her

4-5 The child's vocabulary is like that of a native speaker/ adult

CHILD'S NAME	RATING OF VOCABULARY PROFICIENCY				
	1	2	3	4	5
1.					
2.					
3.					