THE MEDIUM OF INSTRUCTION
IN ZAMBIAN PRIMARY SCHOOLS

BY

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Submitted as Partial Fulfilment
for the degree of

MASTER OF ARTS

IN

EDUCATIONAL PSYCHOLOGY

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Lusaka, Zambia
Dec, 1983.
ACKNOWLEDGEMENTS

No matter how much an author likes to think of what he has written as his own work, many people are involved in the final product. It is therefore my pleasure to acknowledge the help I received from friends and to thank them: Senior teachers and the heads of the primary schools where I conducted my research, Edward Nakasala, Paul Mumeno and Felix Mutale who helped with making programmes of my data for the computer, and Clara Mbulo for typing the manuscript. Direct help came from Dr. Paul Achola, who was a very dependable partner, especially with most of the interpretation of the results from the computer sheets. Without him, the SPSS manual that he helped me understand would still have been jargon to me up to now.

My fiancee, Chitalu, has always been a very outstanding inspiration, without her part of the much needed intrinsic motivation I required would not have been forthcoming.

The valuable help I have received from the people mentioned would have regrettably been wasted but for the strong foundation that had been built by my supervisor, Prof. Serpell. Despite his Directorship of the Institute for African Studies, he worked untiringly and willingly to give the research some direction. To him I say thank you, while absolving him of any blame for whatever shortcomings this dissertation may have.
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To the only brother I had, the late Protasho Sekaleti.
Title: Medium of Instruction in Zambian Primary Schools

Abstract

Literature was reviewed which looked at the Educations, Psycholinguistic, Psycho-social and Cultural effects of the use of heterogeneous student populations' foreign language as a medium of instruction. The study set out to deal with two basic issues: should English be the medium of instruction immediately a child enters school in Zambia or should the child initially be taught in a language he is familiar with for the first three to four years before a switch over is made to English? From each of the two types of Primary Schools (i.e. Underprivileged and Privileged) were sampled 40 (20 males and 20 females) Bemba speaking subjects from grades 5 and 6, making up a total of 80 subjects for the entire study. To illuminate the problem of investigation, achievement tests, attitude and factual information questionnaires and observation schedules were used to which appropriate statistical tools were applied. The results showed that teachers in privileged schools were observed to use significantly more English when addressing their pupils than in underprivileged schools both in English lessons and in Maths lessons. Pupils in privileged schools also used more English when addressing their teachers than those in underprivileged schools, but only in English lessons. Pupils' choice of language for addressing each other in class did not differ across the two types of schools. A comparison of the two groups of pupils on various tests showed privileged school pupils score significantly higher on tests of English Comprehension, but significantly lower on tests of Bemba Comprehension and of Comprehension of Bemba proverbs. Pupils in underprivileged schools scored significantly higher than those in privileged schools on tests of English Reading, English Writing and Bemba Writing. No significant difference was found between the two groups on a test of Bemba Reading. Skills in the two languages were only negligibly correlated. A test of Self-Esteem in relation to their usage of their vernacular language, Bemba, was administered and the results factor analysed. No significant relation was found between scores on the four factors which emerged and performance on the proficiency tests, but high total scores on the self-esteem scale were associated with higher scores on the English Writing and English Reading tests and with lower scores on the English Comprehension test. Responses to a questionnaire on parental attitudes towards, and
1.1 General Introduction

It is now generally acknowledged these days that English is the language of international communication par excellence. For those who use it as a foreign or second language, it is no longer regarded as a luxury that should be restricted to only a few intending to go beyond the period of elementary school. In fact, it is widely held today that foreign language learning should be part of the education of every child, even if he receives only the minimum of compulsory schooling. It is argued from the foregoing that an early start in a foreign or second language is imperative in many countries for two reasons: in a large number of countries children are not in school long enough to permit delay; the foreign language, due to linguistic fragmentation in these countries, is often needed at once as the medium of instruction (Unesco, 1953). From such arguments, it is therefore seen that a start in the primary school is imperative.

This leaves the question of method: what are the effective ways of teaching a child a foreign language? Earlier exposure to the second or foreign language to be learned is often recommended as one method that offers educational advantages. Hence it is advocated today in many quarters that foreign language learning should start well before the teens in the elementary schools. The start entails one of two things: teaching the foreign language to the child as a subject or more significant, using it as a medium of instruction in all areas of the curriculum.

The anticipated success of such a system has aroused widespread interest among policy makers, linguists, psychologists and
educators. Experiments in the teaching of foreign languages have been begun with much enthusiasm in a number of countries. First impressions of results of such studies as the Lambert and Tucker (1972) immersion studies in Canada are favourable. Yet there are sceptics and arguments have been advanced both for and against earlier exposure to a foreign language, especially when it is used as a medium of instruction. At the present time there is no authoritative and unequivocal answer to the question. The answer to it, with everything that it entails is of considerable importance wherever, and for whatever reasons, foreign languages are already taught or are to be introduced into primary education as media of instruction.

The present study is another attempt to investigate the efficacy of the often advocated system of introducing a foreign language as a medium of instruction immediately a child enters school. The question, new as it is in a number of countries, is genuinely contemporary. It is a question of much concern in the world today, whether in Asian or African countries that have to struggle with local vernaculars, new national languages and foreign languages of wide communication at the same time. Briefly put, this question is, should foreign language instruction be introduced as soon as a child enters school?

The current study takes Zambia as a case study to illuminate the problem. The issue of medium of instruction is not peculiar to Zambia. There is currently, serious debate in newspapers, at conferences and seminars, in journals, reviews and other such documents over whether English, a language understood by a minority of the country’s population should be used as a medium at the
expense of a vernacular language immediately a child enters school or whether English should be a medium only after a child has had thorough grounding in literacy in his mother tongue. These two positions will be investigated with regard to the following areas: Social, political and cultural aspects, the educational aspect, and the psychological aspect. Within each of these areas, the medium of instruction question will be investigated with regard to the following issues:

1. **The Social, Political and Cultural aspect**
   
i) effects on preservation of vernacular languages and cultural heritage.

   ii) administrative/organizational feasibility.

2. **The Educational aspect**
   
   i) ease and level of achievement in English

   ii) level of educational attainment in other areas of the curriculum.

   iii) administrative/organizational feasibility.

3. **The Psychological aspect**
   
   i) ease and level of achievement

   ii) level of educational attainments in other areas of the curriculum.

The need for this study assumes much significance when one realises that there is very little information available with regard to the above issues.

1.2 **Arguments for and Against Early Introduction of a Foreign Language as a Medium of Instruction:**

**The Historical Perspective.** "He who knows the past and the present will know the future"
1.2.1 The Pre-Independence Era

The development of a language policy in Zambia was initiated by the British colonial administrators. Basically, English was the official language throughout, but educational authorities believed that a thorough grounding in the pupils' mother tongue was essential to the study of English as a second language. Thus, the general policy was that pupils had to be instructed in their mother tongue up to standard four and English would replace them thereafter. Oral English was introduced during the first or second year of a pupil's schooling as a second language, with reading and writing beginning in standard one.

As a result of extreme linguistic fragmentation in Zambia, and the fact that in an area where several African languages were spoken, a single vernacular was to be used, educational authorities recommended that the culture of the remaining languages be taught in teacher-training schools and passed on traditionally to the pupils. Their rationale as cited by Africa was, "if the language is lost, the culture is in danger of being lost, too. If Africans are to make a contribution to world culture, they must know and respect their own cultural inheritance, and this inheritance is irrevocably tied to language." (Africa, 1980, p.277).

The policy started as far back as 1930. In that year, an Advisory Board on Native Education, recommended mother tongue instruction to teach the mechanics of reading and writing, with English to replace the mother tongue thereafter. In the same year there was support for this
policy from international groups such as the Institute of African Language and Culture which passed a resolution stating, "We are of the opinion that no education which leads to the isolation of the child from his ancestral environment can be right, nor can it achieve the most important aim of education which consists in developing the powers and character of the pupils. Neglect of the vernacular involves the danger of crippling and destroying the pupils productive powers by forcing him to express himself in a language foreign both to himself and to the genius of his race" cited by Higgs (1980 p.3). The institute further contended that it was a universally acknowledged principle to teach a child in and through his mother tongue.

The British government, in its efforts to educate the Africans had been advised by a representative of the Phelps-Stokes Fund who, among other things, strongly favoured the use of a local language for instruction in native schools. After this policy was modified in 1934 by the advisory board already referred to, another advisory organization was set up in 1943, which advocated the use of more English. During the early 1950s, vernacular instruction was officially reduced to the first two primary school years, with a dominant local language replacing it up to standard three and English medium thereafter. The use of English increased in subsequent years at the expense of vernacular instruction from standard three up to six. English was allocated nine periods per week as against vernaculars' four (Higgs, 1980).
Serious debate continued thereafter and featured more and more prominently at international conferences and meetings. In 1951, a Unesco meeting of specialists, gave support to vernacular instruction for the first few years of schooling and English to replace it later. In 1953, Unesco again came out in full support of the idea for it would facilitate learning at higher levels. At the 1960 Unesco sponsored Addis Ababa conference vernacular instruction was favoured. A shift appeared in 1961 and 1962 at the Commonwealth Conference in Uganda and India respectively where it was recommended that, "whenever English was acknowledged as the second language of a country, children should begin formal instruction in English as early as possible, beginning with oral work". (Higgs, 1980, p.5).

It was at the 1962 Conference in India that the policy got concretised by British language advisors, who came out strongly in favour of English Medium instruction from the initial stage of primary schooling. In the same report we are told that in 1963, the then leader of A.N.C. Harry Nkumbula gave support for the policy. And Higgs comments: "from 1930 until independence in 1964, successive changes in the proportion of English language instruction to Bantu media, progressively reduced the importance of African modes of communication" (p.4).

Africa (1980) tells us that during this era, the language of instruction had involved both theoretical and practical problems. Most children received four years of schooling, the period in which it was generally expected they would have had achieved permanent literacy in a language. Was it worthwhile therefore to teach English to these children? In the so called
reserve schools many a time, no qualified English teachers were available. At standard six level the competence in English of both the teacher and the learners was often so weak that students could not understand what was being taught.

1.2.2 The Independence Era.

Just before independence a Radford Commission had been appointed to ascertain how far the goals set out at the Addis Ababa Conference had been met. Among its recommendations were the following: English was to be introduced from grade one of primary schooling; a pilot study was to be conducted to investigate the existing situation as regards medium of instruction in schools and some kind of an English Medium center be established and be manned by English experts (Shana, 1980).

In 1965, after independence, an African Commonwealth English officer toured schools to investigate the English teaching situation in schools, and concluded after the investigations that English had to be introduced from the start. In the same year the then Parliamentary Secretary in the Ministry of Education supported the conclusions which had already been submitted to the then Minister of Education. Whatever problems they saw, these were viewed from either a political or administrative perspective. For instance, the then Permanent Secretary expressed his 'popular reaction' fears to the minister thus: "This is a crucial matter which can either be strongly opposed by the public if it is not well handled... the only basic objection we
can expect from objectors will be why should African children learn in the medium of English, neglecting the teaching of their own African languages and culture?" cited by Shana (1980 p.12). The then advisor to the English inspectorate echoed the same political fears, and to sum it all, the then Minister of Education noted," But the most important point of all is that the scheme will have undoubtedly political repercussions; there should be no illusions about this at all, the advisor and acting chief inspector of schools are right to suggest we devise a plan to carry the people with us on this issue," cited by Shana, (1980 p.12).

In May 1965, the English from the start recommendation was accepted, and it was recommended that an English Medium Centre be established, among other things, to train English Medium teachers. Just before this centre was established in 1966, an Education Act was passed in Parliament in which English was designated as the medium of instruction in Zambian schools. The then Minister of Education, Mr. Mwanakatwe, prepared a memorandum in which he dispelled people's fears towards the English medium, as cited by Higgs (1980, p.7) thus: "As vernacular will continue to be taught as is done at present, after the first 4 years, there is no fear that the traditions, customs and culture of our people will be lost."

However, as the special centre was working on making all schools English medium, in Kenya, where a like centre had been established well before independence, in 1957, things had started
changing, a gradual shift had already started towards vernacular medium of instruction in the first two years of primary schooling because the scheme had been proved a failure (in Chishimba, 1980).

To implement the policy in Zambia, a New Primary Course was launched on experimental basis in 1966. By 1974 virtually all upper Primary Schools were using the curriculum, and 83% of Grade I classes were using it, including all Lusaka and Copperbelt schools, and between 60 and 95% of schools in the various rural regions (in Serpell, 1978). In this primary school curriculum children are introduced to reading, writing and arithmetic in the medium of English irrespective of their home language background, and one of the seven recognised Zambian language is taught for just two periods a week.

1.2.3 The Educational Reforms

During a 1975 ambitious programme of reviewing the entire educational system taken by the Ministry of Education, the following, appearing in the Ministry's Draft Statement on Educational Reforms reflected government argument, "The child must be introduced to formal education through the medium of a familiar language in which he can communicate easily. Although English is the national language, it is not a familiar language to the overwhelming majority of Zambian children when they enter Grade I. For them, communication through the medium of English at that stage is far from easy... it is impossible" (Ministry of Education, 1976, p.11). As a result, it was recommended that the 7 prescribed Zambian languages of education be used as medium of instruction from grades I to 4 after which
English would be used as a medium after it has been learnt as a subject on the time-table.

In the published final document, 'Proposals and Recommendations', the government ruled, after the question of whether it was prudent to continue English medium instruction was put to the public as part of the national debate on educational reforms, that English was to be used as a medium of instruction from grade 1. The rationale offered was that English would promote national unity and make communication between different tribes easier: "although it is generally accepted by educationists that learning is best done in the mother tongue, this situation has been found to be impracticable in the case of every child in multi-lingual societies such as Zambia" (Ministry of Education, 1977, p.32).

It is very interesting if not paradoxical to note that although admitting that English as a medium from grade I is not without some difficulties (originally, communication in English between pupils was thought impossible!), the authorities maintain that the system has worked; "it can be said that the use of English as a medium of instruction from grade I has succeeded" (Ministry of Education, 1977, p.32). How the contradiction between the first and second reform documents has been overcome in the schools to give way to the success of the policy remains unclear. As will be seen later even the question of 'success' has a big question mark. It is almost, if not totally impossible, to imagine how teaching in a language a child does not understand would lead to success. For instance, we learn from Serpell and Mwanalushi (1976) that one of the problems arising out of extensive
use of English for the child when he leaves school (i.e. at the end of primary school) is his insufficient linguistic competence. The whole question of 'success' becomes too complex when we learn from Hopper's (1981) case study of Mwinilunga that in fact using English as a medium is not the main problem because in practice much is still being learned in local languages as the general level of proficiency in English seems rather low. If at all there is any 'success' could it be due to this latter factor? Or could this latter factor be responsible for the lack of success in government policy? Answers to such questions lie in a thoroughly and systematically conducted research in the primary schools.

1.3 The Educational Aspect: (1) ease and level of achievement in English learning by the end of primary school....

Basically, there are two positions debated:

Should English continue to be used as a medium of instruction in Zambia primary schools from the entry of pupils into grade I, or should a vernacular be used for the first 3 or 4 years of primary schooling before English replaces it? The policy to date remains as it was after the passing of the Education Act of 1966; English is used both as a subject and a medium of instruction immediately a child enters school. Vernacular languages are taught as subjects and are usually allocated four periods per week as against English's nine. Comparatively speaking, English has more written resources than a vernacular. The many vernacular resources, (i.e. vernacular novels, dictionary, bible, prayer books and administrative literature in at least 9 or 10 of the Zambian
vernacular languages, plus newspapers in seven of these languages) are rarely found or used in schools as compared to most English resources. Libraries are mainly full of English texts and literature.

Talking about the ease and level of achievement in English learning by the end of primary school, the government's policy of introducing English medium instruction from grade I has been rationalized thus: since English is the medium in all forms of post primary education in Zambia greater exposure of children to English medium schools will result in greater abilities on the part of the child to understand, speak, read and write English when he leaves primary school; if nearly everything that is important to the child at school takes place in English the child soon realises the importance and necessity of learning to speak and understand the new language. In addition, instruction in English from grade 1 will encourage the child as he progresses to use English increasingly in almost all his activities, with this resulting in effective language learning. (Curriculum Development in Zambia, 1964-74). These same reasons are offered in McAdam's (1973) Zambia Primary Course (ZPC), English component.

Serpell (1978), among others, an advocate of the alternative system has argued that English must first be learned as a subject before it can be used as a medium of instruction. The other argument is that the child will be more comfortable in the school environment and will adjust to learning more quickly if he is operating in his own language during the initial school experience. He observes, for instance, that, "rather than promoting the sterile
recitation of idealized forms divorced from understanding, the purpose of language teaching should be to develop the child's capacity to express what she already knows, wants and feels. This must surely be easier to do by building initially on the child's command of the language of his home environment," (p.23). He is supported by Houis (1976) who, in talking about pedagogical functions of the languages in bilingual education, says that literacy skills are better acquired in the language in which the child is most competent; his mother tongue. Implicit in the foregoing argument is the idea that thorough grounding in a child's vernacular language facilitates his learning of the second language. This thesis is however contradicted by Gatenby (1952) who tells us that this is one of the popular fallacies in foreign language teaching.

As to whether the policy is working, the situation in the schools contrary to government authorities' expectations, appears different. Chishimba (1980) tells us that in fact it has generally been acknowledged that the standard of English language proficiency has been declining among school going students, a fact that has been realised by all teachers and inspectors of English in primary and secondary schools. He concludes", although it remains an empirical question to what extent some progress in this direction has been achieved since the inception of the ZPC programme enough evidence exists to show that weaknesses in the use of English is the greatest handicap in academic performance in secondary schools" (p.34). In a study conducted to determine the reading skills of grade 3 children, Sharma (1973) concluded, "it is obvious from the survey that the reading skills
of grade 3 children are very poorly developed. The majority of children in grade 3 are not able to read all the words even at the level of grade 2" (p.12). This prevailing situation, as Chishimba (1980), supported by Moumouni (1968) put it, has its roots in primary education vis a vis literacy.

"There is no need for protracted research to perceive that a key problem in Black Africa... is teaching them how to read and write rapidly" (Moumouni, 1968, p.106).

The debate becomes more complex when Serpell (1966), Murphy (1976) and Mclaughlin (1978) concede that it is probably correct to say that the earlier in life a child encounters a language the more successful he is likely to master it. Mclaughlin for instance cites Lambert and Tucker's total immersion methods of teaching French in Canada (where from the beginning of school pupils are instructed exclusively in the second language to be learned) and concludes", carefully conducted research has shown that the experience in primary school is a beneficial one and that in a few years the children have a fluent grasp of their second language without showing any ill effects in their academic progress in other subjects" (p.204). And yet the situation as of now in Zambia primary schools does not live up to this expectation. If the policy is being followed mandatorily, then what could account for the decline in the standard of pupil's English proficiency? Or could the reason that government policy is not being implemented account for this? A major piece of information missing here concerns what is going on in the schools. Apart from the Hoppers (1981) Mwinilunga study already referred to, studies dealing with
observations in the schools, especially those directly linked to medium of instruction are virtually non-existent. A study like the current one, combining documentation of what is going on in the schools vis a vis the medium of instruction and an assessment of/standard of language (English as well as vernacular) proficiency, becomes imperative.

1.4 The Educational Aspect II

Level of general educational attainment.

The main point of focus here is whether instruction in a pupil's foreign language (which is assumed to be his weaker language) affects his attempts to learn and understand material in other areas of the curriculum or not. The government's policy makers argue that the English that pupils would have learnt by the time of change over to English in the alternative proposed system would be inadequate to cope with the change-over to English medium instruction and pupils' work in other subjects as a result would suffer. A study by McNamara (1967) in Ireland found a relationship between grasp of the language of instruction and educational attainment in Arithmetic. As for students who in the middle of their schooling changed from being taught arithmetic in their mother tongue to being taught in a second language, his studies indicate that there is a falling off in attainment. This however, contradicts the findings in the Lambert and Tucker (1972) studies already referred to. McLaughlin (1978) tells us that there were no detrimental effects on other school subjects such as social studies and arithmetic. The latter view seems to get some support from Patridges' (1963) Bulawayo studies of the Ndebele. Rather than teaching in a second language it is
the methods that are wrong. McLaughlin however concludes by saying that most of the available studies on the effects of instruction in a 'weaker' language are inconclusive and some of the arguments purely speculative.

A detailed study that is specifically dealing with Zambia was that carried out by McAdam (1973), who as Director of the English Medium Centre, now called the Curriculum Development Centre, was responsible for much of the development of the New Zambia Primary Course. He reported a study in which he attempted to compare attainments in English language and reading skills, mechanical and problem arithmetic and social studies. His sample was one urban sample and one rural in each of two provinces. One had adopted the ZPC and the other had schools which were still using the traditional method prior to the introduction of the ZPC. Zambia Primary Course pupils scored higher on tests of English and social studies but significantly worse on problem arithmetic. He also discovered that ZPC pupils' scores on English tests were bimodally distributed with about half the pupils scoring as poorly despite the 4 years of 70% exposure to English medium instruction, as those who under the traditional method had been exposed to English for about 17% of their corresponding time in schools*. Despite the retardations and reading deficiencies found in the ZPC pupils McAdam concluded that the ZPC scheme was working effectively with very minor educational losses.

The findings in the study are however not conclusive enough as they leave certain questions unanswered. For instance, McAdam
does not explain why the distribution was bimodal, Shana and Higgs (1975) caution that the findings should be taken with reservation because the study failed to control for certain variables; the study was conducted along the line of rail where English is relatively more pervasive in and out of the school setting, there was, in addition, absence of matching of the pupils in the English and non English medium scheme. The scheme's success, we saw earlier, has been in fact questioned by Serpell and Mwanalushi (1976), Chishimba (1980) and recently by Hoppers (1981).

It is brought to our attention from the foregoing that educational planners often devise policies based on administrative and political considerations at the expense of the so important educational, linguistic and pedagogical factors. As Hoppers (1981) observed in his study, the failure by planners to devise policies based on sound grounds is not due to lack of information on the subject to be tackled: "even when sufficient data are available and past experience has been evaluated, it is still possible for decision makers, often out of political expediency, to persevere with 'traditional' assumption and remedies" (p.7). Quite enough has been said and written about the fact that government language policy is not sound enough to allow for proper mastery of skills by pupils learning to read and write. Unfortunately, save for intelligent speculation, very little exists in terms of what the exact problems are and how these affect pupils' literacy learning. This study, in a way, is an attempt to this end in the hope that where these problems are identified, their effects analysed and suggestions for alternatives made, some serious re-thinking would be provoked in planners' minds.
1.5 The Social–Cultural Aspects

Lewis and Massad (1975) observe that, "it is doubtful whether any language, no matter how utilitarian the aim of the student, can completely be divorced from its associated literature, its intellectual milieu, and the social context in which it has been formed... the person who has learned English as a foreign language is unlikely to remain completely immune from the influence of that tradition and culture" (p.21). It is due to such assumptions as the above that it has been held in certain quarters that Africa's failure to meet its cultural, social and economic development are due to its educational systems adopted from western models. Manuwiuke (1978) for instance, citing Okeke, summarizes the problem in African education in these words: "...the dysfunctionalism in African education is as a result of the unilateral utilisation in a number of African countries of the language of the colonial power as the language of education" (p.213).

Such criticisms as the foregoing are generally based on concrete facts, but paradoxically the same policy makers and educators who defended them and imposed upon their countries the system inherited from the colonial power, alleging its internationality and the complexity of the problems which would arise in an education system using different languages and cultures, are aware of the status quo and would rather things remained as they are, for social and political reasons. As Mwanakweta (1976) put
it, "any suggestion for an indigenous national language based on any policy is futile. It would cause disastrous social and political upheavals..." (p.15).

Up to this date, despite a shift in policies in a number of Angolphone Countries, Zambia still advances/offers these reasons for using English as a medium of instruction in its education system. The reasons are always political and administrative as we saw in the two education reform documents earlier on. The question of language and culture revival, the authorities hoped, would be solved by teaching indigenous languages in all primary schools both scheduled and unscheduled primary schools. In so doing they hoped to raise the status of vernacular languages and this would eventually lead to a cultural revival. It was hoped, as the then inspector of schools put it, that this new Zambia language curriculum would preserve and promote the nation's culture and 'produce' pupils able to demonstrate pride in the culture, traditions and customs embedded in Zambia languages (Chishimba, 1980). Government position has not been without opposition at home. Kapwepwe (1970) put it thus: "We should stop teaching children through English right from the start because it is the surest way of imparting inferiority complex in children and the society... it is the surest way of killing African personality and African culture..." (p.68).

In his proposed system of instruction of pupils/vernacular for the first four years of primary school to allow for mastery of basic literacy skills before a switch is made to English medium instruction Serpell, (in a paper presented to the Zambia Language Group in 1975), also touches the cultural issue through his envisaged benefits that
would accrue were this system adopted;

(i) by using Zambia's local dialects to introduce basic literacy, we may help to save them from disappearing into sterile isolation, that is give impetus to growth of the Zambian Languages.

(ii) by using the local dialects to introduce basic literacy we may raise the status and widen the scope of the Zambian Languages.

(iii) we will by so doing promote in the Zambian children a pride in their local culture. The same envisaged benefits were echoed in the UNZA (1976) resolutions on the educational reform document of 1976, which had advocated the introduction of Zambian Languages as media of instruction before a switch is made to English after grade 4.

Important as such suggestions are, there is very little evidence for instance to suggest that English medium instruction from grade 1 leads to a dissappearing into isolation of the pupils' vernacular, that this leads to a pupil's alienation from his parents and the lowering of the status of the pupils' mother tongue. It is difficult to see how far the benefits Chimuka (1976) talks about (i.e. that children are now able to write and read intelligently in their mother languages) have been realised in the curriculum. Mwanakatwe (1976), supported by Serpell (1980) tell us on the status of English in Zambia, that it is accorded superior status in schools and pupils and teachers no longer learn indigenous languages seriously. To pupils, vernacular is a second rate subject, which even in secondary schools is regarded as a soft option which only weaker students may be obliged to offer. The reason for this status quo is not difficult to see, English is held up as the passport to economic success in the Zambian society.

Since English has the status that it has, it is difficult to see the possibility of a cultural revival yet through a vernacular
language. It is unclear whether the status would be raised through teaching the vernacular or through using it as a medium.

In investigating the current situation, vis a vis English and vernacular in the schools, the current study intends to throw some light on the issues preceding.

1.6 The Psychological Aspect I

Bilingualism:

The demand for an early start in language learning in the primary school is based on a psychological consideration that second language learning is easiest when one is young. In fact, for many protectors of this reform, the psychology of language is the keystone for a bilingual education in the primary years.

Bilingualism has been shown to be both feared and admired. Some arguments against a second language in the primary school are derived from the fear of the ill-effects of bilingualism. One of the common fears is that second language learning in an education system such as Zambia's has a detrimental effect on a pupil's vernacular language. Lambert and Tucker (1972) tell us that the best motivation to learn a new language is the "integration" approach where the learner learns the language for purposes of wanting to learn more about the culture associated with that language. They contrast this with the instrumental approach where one learns a new language for purposes of social and economic
reasons, as it is generally held it is the key to success. Therefore, since vernacular languages have little instrumental value, have they not been detrimentally affected by the position of English?

Malherbe (1946, in McNamara, 1964) has reported that either there is a beneficial effect on the second language (in this case English) if it is used as a medium of instruction and/or a detrimental effect on the first language, the mother tongue. In a carefully controlled study, where variables like I.Q., social class and quality of teaching were controlled, McNamara (1967) found no differences between pupil's first and second language. Although the expected result was that extensive teaching in a second language would have some general beneficial effect on that language and some general detrimental effect on the first, he concluded that up to now these are unknown. All that is known to date is what Lambert and Tucker (1972), found in total immersion projects in Canada. They found that this resulted in equally good progress through the curriculum in the second language as was achieved by native speakers of that language without any interference in the mastery of the home language.

But, as Serpell (1980) cautions us, although these studies may be interpreted as showing that "where there's a will there's a way" nevertheless "the collective will of children, parents, teachers and peers which was achieved in these experiments may be a phenomenon hard if not impossible to replicate in other cultural settings" (p.15). Africa (1980) sums up the whole situation this way: "in spite of the many studies which have investigated the advantages and disadvantages of using the mother
tongue or second language as a medium in the schools, there is no consensus as to which practice is best for all settings" (p.90).

1.7 The Psychological Aspect II

The Change-Over Issue.

Another area deserving more critical attention in the continuing debate of the medium of instruction issue has been the point at which vernacular should give way to foreign language instruction in the alternative proposed system. It has been almost taken for granted that the chosen vernacular should be used only for the first 3 to 4 years of primary schooling. Three related questions concern the points at which the foreign language should be introduced as a subject and hence the length of the period it will be taught, and the optimal period desirable for the vernacular to be used as a medium of instruction.

Government policy formulators argue that the advantages of introducing English from grade one as a medium far outweigh those for the alternative system. Mwanakatwe (1976) for instance, argues that the school children would be freed from the emotional disturbances which often occur under the traditional method when English replaces an indigenous language after grade four. Hill (1965) seems to be talking in the same vein when he points out that there are psychological, developmental, linguistic, social and educational change-over effects that need consideration before one could make a decision. Some of the questions he poses, for instance are; how
do children form concepts; do concepts formed in the first
language interfere with second language concepts; does the
age of the child have any effects on the ease with which he
may transfer from learning in one language to learning in another?
The final problem takes the form of a dilemma; "the change-over
takes place in the seventh year of school when children are
about 13 or 14 years... if the change-over is made too early the
result is parrot learning, mental confusion, and lack of
understanding, and yet the longer English can be used for
something real, rather than just learned in a somewhat artificial
atmosphere of the English language lesson for future use, the
better will be the pupil's knowledge of the language." (Hill,
talking about the Tanzanian case in Some Problems in the Change-
Over from Swahili to English as the medium of instruction, 1965,
p.54).

Serpell's (1978) view that thorough grounding in the
vernacular in literacy skills will facilitate second language
learning had earlier been supported by Stern (1963), but he seems
to lean more towards government rationale when he contends that
this is however superficial, "it can be argued on psychological
grounds that the habituation in reading and writing in the native
language over a long period may militate against the spontaneous
acquisition of speech in a second language", (p.32). Another
related problem raised in Serpells' (1978) proposed system concerns
the points at which one can say with definiteness that basic
literacy has been established. Although Serpell feels by Grade 3
this is established, there is no concrete evidence that this is
or would be so.
Presently, there is very little information available for one to conclude with certainty that what has and is being proposed has and/or is working respectively.

1.8 The Psychological Aspect III: Language and Self-Esteem.

Enough literature is available from psychologists and philosophers that the feeling of personal worth plays a crucial role in human happiness, and effective studies have been conducted by Coopersmith (1966), for instance, to show that people with a high degree of self-esteem are active, expressive individuals who tend to be successful both academically and socially. Coopersmith (1966) examined pupils' styles of expression in drawing and other creative products. He found that high self-esteem subjects' drawings were characterized by activity, creativity and so on. The other drawings by low self-esteem subjects revealed lack of confidence as they were drawn smaller, constrained and distorted.

Would skills in a language directly relate to self esteem, as were drawing skills in Coopersmiths' subjects? This is a complex question. It might be supposed from abstract theory that higher abilities in a language are related to a person's self-esteem and vice versa. This seems probable, for one thing, language skills in for instance writing or reading require expression and are related to the quality of what has been expressed in terms of accuracy, volume and so on. One study that has looked at an aspect of
language vis a vis self esteem is Higgins' (1976). He observed that a deficit in communication skills in people results in negative consequences in those peoples' self-esteem. It seems from here that the situation with other language skills would be the same.

Most of the available literature however, is concerned with speakers of a first language and their self-esteem. There is very little about foreign language skills and self-esteem. If we accept Lambert and Tucker's (1972) idea on the best motivation for learning a foreign language then one would predict that Zambian pupils' self-esteem is tied to social values including the high prestige of English, so that skills in English would be directly related to self-esteem, irrespective of skills in a vernacular language. Because of the high status that English has in Zambia for social and economic advancement reasons, it is quite clear that there is greater motivation to learn it and this consequently leads to pupils attaining higher English skills and thereby enhancing their self-esteem. Kapwepwe (1970) makes the connection between self-esteem and language probable when he claims that instruction in the medium of English leads to an inferiority complex in children. His argument seems to be that learning English leads Africans into a trap, since the better they know it the less they can afford psychologically to value their indigenous culture. The complex is a form of negative self-esteem based on the premise that as a non-English person one is 'less valuable' than the English person one can never become and yet which represents the ideal which one's behaviour aspires to emulate.
1.9 Administrative/Organisational feasibility.

One of the reasons advanced by educational planners for adopting the English medium in the Zambia Primary Course is that this will facilitate the easy production and preparation of materials for teaching since all these will have to be in one language. They maintain that the multiplicity of language backgrounds of pupils would not make this possible if a vernacular had to be introduced as a medium. One often finds a classroom where only a handful of the pupils claim the language being taught to be their mother tongue. Then there are those areas, where one finds in a class only a minority do not claim a particular language their mother tongue. To this is of course added the problem arising from the teachers' language vis a vis the pupils'. Another reason given is that the training of teachers, coupled with the transfer of teachers among different provinces will be eased.

In the discussion section of this study, these issues will be examined in detail with regard to the feasibility of Serpell's proposed traditional system—where instruction is first in vernacular before a switch over is made to English at later grades—and the efficacy of the government's mandated ZCP scheme—where English besides being learnt as a subject is also used as medium of instruction straight from grade I. In so doing, case studies from other countries will be cited and related to the Zambian situation. The social economic aspect of course will not be left untouched.
1.10 **Rationale for the Study**

Zambia Educational planners, as has been brought to light in the foregoing section, made a language education policy that was based on administrative and political considerations at the expense of the so important educational, psychological, pedagogical and linguistic grounds, Shana (1980). If the purpose of English education has to be to 'educate', then serious efforts must be made to examine the current situation in the schools outlined above. This can only be achieved by systematic research whose findings will provide a basis for linguistic decisions made.

Furthermore, an investigation of the link between the English language and the vernacular can help us explain some of the cultural trends taking place in society. To date, as shown in the literature review, a lot of what is available as regards English medium instruction, its effects on a people's culture and vernacular languages' status, is more or less educated guesses or based on either inconclusive findings or culturally inapplicable research findings as are the McNamara (1967) and Lambert and Tucker (1972) immersion studies respectively.

1.11 **Problem Formulation**

The choice of English as medium of instruction from the start of primary schooling has certain consequences and implications. This study addresses itself to the following questions:

(a) to what extent current English medium instruction
and (ii) does it lead to a less positive attitude by the child towards his vernacular language and thereby lower his level of self-esteem?

(iii) what are parents' attitudes towards foreign language learning?

(iv) what are teachers' views and attitudes towards the English medium?

Like most investigations of this nature and complexity, this study was initially conceived and developed within a framework of informed 'hunches' or intuitions which had been generally approved by the experience of teachers and linguists and modified by the conclusions derived from previous research on classroom instruction. The study's main focus was interest in predictions based on the consideration of a set of variables. Included here were such things as factors related to the socioeconomic level of the student's home, parental attitudes towards English and English medium instruction; the linguistic environment of the student's home, the intensity of the student's instructional program in English and vernacular. Concern was also toward the classroom relationship between the teacher and the pupil. Here, the variables looked at were those related to classroom practice, for instance, use of the mother tongue in teaching relative to English; the emphasis given to various aspects of language instruction, such as teaching grammar, the early or later introduction of reading and writing.

In addition to the above, interest was also in some purely linguistic and psychological considerations, as has been pointed out already. For instance, it was hoped that an analysis of errors in reading and writing would provide information concerning how students learn English and the most frequent
hazards they encountered. Based on research evidence presented, five hypotheses will be tested in this study.

**Hypothesis 1.**

In a large proportion of grade 1, 2, and 3 classes in government unprivileged schools, frequent use of vernacular languages to supplement the mandated use of English will be observed. Teachers and linguists have pointed out that the average African child does not know the English language in which he is taught. Instruction is therefore assumed to take place in a language totally unfamiliar to the child. Since most children in government schools like Kaunda Square Primary School have rather little contact with English, the teachers cope with the problem by switching to and fro between English and Vernacular.

**Hypothesis 2**

Where the mandated ZPC (Zambia Primary Course) is heavily used and vernaculars are discouraged there will be a profound negative effect on pupils' vernacular language skills in terms of analysing and understanding proverbs and so on. The hypothesis arises from the cultural debate we saw above.

In hypotheses 3 A and B the question to be answered is, to what extent is pupils' self-esteem related to their language proficiency?

**Hypothesis 3A**

English proficiency tests of reading, writing and comprehension will be negatively correlated with measures of
Hypothesis 3B

A closely related competing hypothesis is that self-esteem is tied to social values including the high prestige of English and that skills in English will be positively related to self-esteem, irrespective of skills in pupils' vernacular languages.

Hypothesis 4.

There will be a positive correlation in performance between pupils' vernacular language skills in reading, writing and understanding, and English language skills in the same.

Hypothesis 5.

There will be a relationship between pupils' relative performance in English compared to vernacular in the above mentioned skills and parents' attitudes towards the two languages respectively. Children will tend to perform relatively better in the language most favoured by their parents' attitudes. Parents' attitudes towards a second language, it has been observed by Serpell (1980), has a motivational role to play in a child's learning of that language.
<table>
<thead>
<tr>
<th>Hyp. 1</th>
<th>Code-switching</th>
<th>Hyp. 2</th>
<th>Hyp. 3A</th>
<th>Hyp. 3B</th>
<th>Global</th>
<th>Global</th>
</tr>
</thead>
<tbody>
<tr>
<td>Privileged</td>
<td>Unprivileged</td>
<td>Privileged</td>
<td>Unprivileged</td>
<td>Privileged</td>
<td>Unprivileged</td>
<td>Privileged</td>
</tr>
<tr>
<td>M</td>
<td>F</td>
<td>Less</td>
<td>More</td>
<td>Less</td>
<td>More</td>
<td>Lower</td>
</tr>
<tr>
<td>5 M</td>
<td>6 F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NB**: M = MALE  
F = FEMALE
CHAPTER 2

METHODOLOGY

2.1 The target population. To date, the African languages are not adequately developed as a medium of instruction and the teachers are not trained to use them. In fact it is against government policy to do so, although the reasons offered have nothing to do with the question of whether African languages are adequately developed or not. As most African children do not speak English at grade 1, the practice vis a vis the medium of instruction varies widely between schools. Moreover there is no authority or mechanism to compel conformity to the policy. The leaving of the practice of the policy to the discretion of the teachers, and the absence of check or even interest by the inspectors conceal the difficulties of the languages as media of instruction. As a result the practice today, as opposed to the mandated ZPC (Zambia Primary Course) is more use of the vernacular in non privileged schools in mostly rural areas and some schools in the periphery of towns in the urban areas. Examples of such schools are: Kaunda Square Primary School, Tunduya Primary School, both in Lusaka; Kawama Primary School in Luanshya and so on. In privileged schools like Jacaranda Primary School, Northmead Primary Schools in Lusaka and Kitwe Primary School in Kitwe, the practice is the opposite of what goes on in non privileged schools. Unlike the situation in the former, pupils here have alot of contact or exposure to the English language such that they are capable of some English language. Hence teachers usually use more English in teaching as compared to the vernacular.
In all there were 80 subjects involved. Forty were selected from each type of school, comprising 10 males and 10 females from each grade level: 5 and 6. These were randomly selected from the total of all Bemba speaking pupils from grades A, B and C and 6A, B and C. To these subjects were administered the writing, reading, comprehension and proverbs tests, and a questionnaire. Grades 1, 2, 3, and 4 were simply observed. The decision to exempt grades 1 to 4 from the writing tests was arrived at after the discovery from the pilot study that pupils of these grade levels hardly demonstrated any writing ability. This was more so for the first three grades.

Tables 2 and 3 below show the number of children from each grade in each school and the tests administered to different grade levels.

2.2 Description of Research Instruments.

(a) An Observational Schedule to test Hypothesis one.

This was a sheet on which frequency counts of incidents of English, Vernacular and 'mixed' usage in classroom instruction were done. The sheet has 18 small columns divided into 6 major three unit column sections. The three units are titled 'E' for English, 'V' for Vernacular and 'M' for mixed. These columns are crossed by six rows, that represent the direction of an utterance (i.e. whether it is T to P, for teacher to pupil, P-T for pupil to teacher or P-P, for pupil to pupil). The remaining three rows are for the actual utterances. At the bottom are instructions for the observer. See Appendix A.
Tests of indigenous Vernacular languages skills and English language skills reflecting the wording of hypothesis number two.

(i) A test to interpret 10 selected Bemba proverbs from J.T. Milimo's (1972) Bantu Wisdom. These items were arrived at after a pilot study;

(ii) A comprehension test in both Bemba and English. The one in Bemba was a 12 item test with 8 of these being multiple choice and 4 short answer type items worth 3 marks each. The total of possible marks on this test was 20. The comprehension test was on a fable from a book "Utushimi" which means fables. (NECWAM).

Table 2: Table showing the number of children drawn from each grade level in each school

<table>
<thead>
<tr>
<th>School</th>
<th>Grade  5: ABC</th>
<th>No.</th>
<th>Grade  5: ABC</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kitwe</td>
<td>10</td>
<td></td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Grade 6: ABC</td>
<td>10</td>
<td></td>
<td>Grade 6: ABC</td>
<td>10</td>
</tr>
<tr>
<td>Luanshya</td>
<td>Grade 5: ABC</td>
<td>10</td>
<td>Grade 5: ABC</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Grade 6: ABC</td>
<td>10</td>
<td>Grade 6: ABC</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Total...40</td>
<td></td>
<td>Total.....40</td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Table showing different grade levels and the tests administered

<table>
<thead>
<tr>
<th>Observations</th>
<th>Proverbs</th>
<th>Reading</th>
<th>Writing</th>
<th>Comprehension</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>4</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

* A, B, C - Class
A like fable from one of the pupil's readers, Zambia Primary Course Reader IV, was used for the English comprehension test. The test contained 14 multiple-choice items and 3 short answer type of two marks each.

(iii) Writing test. This consisted of a sequence of 6 pictures on which a student was required to describe in English or vernacular respectively the events depicted in the sequence.

(iv) Reading test. The English test consisted of 25 sentences used in Sharma's (1973) study of grade 3 Reading Skills. The Bemba test involved reading a short fable of about half a page.

(c) The Revised Janis-Field Scale* reflecting the wording of hypothesis No. 3

The two groups' responses were compared (in relation to their performance on the English and Vernacular Tests) on a self-estee inventory. The Revised Janis-Field Scale was used, slightly revised by the current researcher to add an element of language to the items in the Scale (See the original in the Appendix J). The scale is in two parts, in the first part the items are keyed so that an affirmative response indicates low esteem. In the second, items are keyed so that an affirmative response indicates high esteem. In all, there are 20 items contained in the first part and 11 in the second. In the current study the items in the two sections were however, interspersed (i.e. first item followed by the 11th item) for counterbalacing purposes. Besides, half the items were translated into Bemba to counter any possible confounding by the language difficulty factor. The items contained in the scale are answered on a five point
Likert Scale: very often; fairly often; sometimes; once in a great while; practically never. The form is self-administered and takes about 10 to 15 minutes.

(d) To test Hypothesis number 4, instruments (a) and (b) were used.

(e) Parents' questionnaire, testing hypothesis number five.

This had 20 items which sought information about their level of education, the extent to which they use either English or Bemba in a set of different environments and their attitude towards English and medium of instruction. Items 10 and 11 were answered on a 4 point scale: never, sometimes, often or always, the rest of the items were on a 3 point scale. As can be inferred from the Appendix N, the questions in the parent's questionnaire fell into two categories which constituted the Usage Scale (comprising items 10, 11 and 12) and the Attitude Scale (comprising items 13 to 20). The scoring on these items was as follows: on questions, 14 to 18, 2 points were awarded for 'agree', one for 'I don't know' (D.K.) and no point for 'disagree' (D). For questions 19 to 20, no point was given for 'agree', one for 'D.K.' and 2 for 'D'. For question 13 no point was given for 'very important', 1 for 'important' and 2 for 'not important'.

In the English usage in the home self-rating scale items were scored thus: for item 10, 12 zero was given for 'never', one for 'sometimes', two for 'often' and three for 'always'. For item 11, three was given for 'never',
In addition to the above, information was collected regarding the number of periods allocated to English and Bemba from grade 1 to grade 6. Unstructured interviews were also conducted with the longest serving teachers and the pupils involved in the study. Information sought from the teachers was about their difficulties in teaching English, how they overcome these, their views of the English medium from their experience, experiences from colleges (i.e. teacher training colleges) vis a vis English as opposed to vernacular and the teaching of Bemba. From the pupils information collected was mainly concerned with their experience in terms of difficulty in the reading and writing tests in both languages.

2.3 Procedure: Administration of the instruments

Grade 1 to 6 were observed, in English and Mathematics lessons. Six 5-minute observations were made. In these, the observer marked in the appropriate slot of the observation schedule, by way of a tick, the first teacher to pupil, the second pupil to teacher and the third pupil to pupil utterances. At the bottom of the schedule, depending on the nature of the utterance, it was recorded in the appropriate given space. In other words, if during the first 3 minutes of class the teacher says to the pupil(s), 'What is happening imwe kanshi', this will be recorded by way of a tick in the row marked, first teacher to pupil utterance, under 'M' for mixed and the actual utterance will be recorded in the area marked utterance's space, against "M" for mixed. An utterance constituted a word, a phrase
In interpretation of proverbs, pupils were simply asked to say what each of the proverbs meant in the provided space after each. There was no time limit; pupils worked at their own pace. In administering the comprehension tests, pupils again were not given any time limit and the answering was done on the question papers. But before this, the researcher read the comprehension passages once before pupils could do the exercise. In the writing tests, the pupil was given two minutes in which to study the sequence of pictures and think about what he would write. He was told that he could write whatever he liked about the content of the picture-sequence provided this was in proper English or Bemba. The subject was also informed that his score on this test would be based on the amount written, on the accuracy of the grammar, and on the appropriateness and variety of vocabulary, tense and structure. No time limit was imposed. In the oral reading tests, the subject was informed that his score on this section would depend on the accuracy of pronunciation and the efficiency with which he read these. The student was instructed to read aloud clearly and naturally. There was no time limit, although the time each student took to complete the reading was noted. Care was taken to prevent the students from having access to what was to be read before they entered the testing room. Whilst the reading was going on, the tester noted the following: number of errors (i.e. words read wrongly) and number of repetitions.

Examples of wrongly read words:

**Bemba**                      **Read**

ALILA (he cries)                ALALA (he sleeps)

Eco (that is why)               EKO (that is where)
English

FLEW       FEW
BOUGHT     BROUGHT
ROOF       ROOF

All these errors were treated as wrongly read words, i.e.
mispronunciation and misreading of a word all constituted
wrongly read words.

2.4 Scoring

In the test of interpreting proverbs, the student got a
score of 2, 1 or zero depending on whether the interpretation
was correct, partially correct or not correct at all respectively.
In the comprehension tests, all multiple-choice, except short
answer type questions, were allocated one mark each. Short
answer type were 0, 1 or 2.

In the writing tests, each subject's response was scored
for volume, accuracy and variety as follows:

Volume. The number of intelligible clauses written up to
a maximum of 10, this cut-off point was established before the
scoring session began.

Accuracy. Each intelligible clause was scored for
accuracy on a four-point scale within each of the following two
categories; grammar and vocabulary:

(a) Grammar.

  0 = 3 or more errors or omissions
  1 = 2 errors or omissions
  2 = 1 error or omission
  3 = No errors or omissions
(b) **Vocabulary.**

0 = 3 or more incorrect or unintelligible words  
1 = 2 incorrect or unintelligible words  
2 = 1 incorrect or unintelligible word  
3 = No incorrect or unintelligible word.

(c) **Variety of Tense and Sentence Structure.**

0 = no variety in either tense or structure  
1 = some variety in either a tense or structure  
2 = some variety in both tense and structure  
3 = considerable variety in both tense and structure.

When all the three sections of the test had been scored as described above, the scorer made a global assessment of the students' performance on the whole of the test and assigned him a rating on a four-point scale, defined as follows:

0 = poor response  
1 = below average response  
2 = Average response  
3 = Above average response

From here, for reasons of clarity, no further analysis of the three components assessments were made. It were these global assessments of the students' performance that were used in the analysis. The same scoring procedure was employed in the oral reading tests. Each subject's response was scored for time taken to complete, relative to the average time taken for that item, number of errors and the number of repetitions made.
A four-point Scale was used.

Amount of time taken: 0 = Above average time taken
1 = Average time taken
2 = Below average time taken
3 = Very little time taken

Number of errors: 0 = 3 or more errors or omissions
1 = 2 errors or omission
2 = 1 error or omission
3 = No errors or omission

Number of repetitions: 0 = 3 or more repetitions
1 = 2 repetitions
2 = 1 repetition
3 = No repetitions.

After that, the inter-rater reliabilities for the test were calculated as the tests were rated by two people: the researcher, a former teacher of English and the head of the English department of a Secondary School, both fluent speakers of Bemba as a first language.
CHAPTER 3

RESULTS

3.1 The Medium in the Schools: Hypothesis 1

A Chi-square was performed. In addition graphs depicting the amount of English or Vernacular instruction taking place in English and Mathematics lessons from grade 1 to 6 were drawn.

An analysis of the results indicates that there is more vernacular medium instruction in underprivileged schools than in privileged ones. Conversely, there is more English medium instruction in privileged schools than in underprivileged ones. Table 4 shows that in T (teacher) to P (pupil) talking the proportion of utterances in English is higher in privileged (89% of the total observed frequencies) than in underprivileged schools (58% of the total observed frequencies) while the converse is the case for utterances in vernacular. A Chi-square test carried out on the data obtained was significant at the .001 level ($x^2 = 24.937$, df=1, $P < .001$). The null hypothesis is therefore rejected.

The same picture is revealed in Maths lessons, and the same conclusion with regard to the null hypothesis is arrived at (76% vs 9%; $x^2 = 25.906$, df=1, $P < .001$). As for pupil to teacher talking the results show that in English lessons, there is a higher proportion of English usage in privileged schools (73% of the total observed frequencies) than in underprivileged schools (54% of the total observed frequencies). The Chi-square shows that this difference was significant ($x^2 = 12.135$, df=1, $P < .001$). This is not so in Maths lessons and in pupil to pupil interaction in both lessons. Here pupils
Table 41: SHOWING MEAN OF INSTRUCTION FREQUENCIES IN ENGLISH AND MATHS LESSONS AND THE CALCULATED CHISQUARE

<table>
<thead>
<tr>
<th>DIRECTION OF UTTERANCE</th>
<th>T P</th>
<th>LANGUAGE FREQUENCIES</th>
<th>$X^2$</th>
<th>df</th>
<th>Sig. Lev P&lt;sub&gt;0&lt;/sub&gt;</th>
<th>DIRECTION OF UTTERANCE</th>
<th>T P</th>
<th>LANGUAGE FREQUENCIES</th>
<th>$X^2$</th>
<th>df</th>
<th>Sig. Level P&lt;sub&gt;0&lt;/sub&gt;</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>P</td>
<td>E 33</td>
<td>4</td>
<td>1</td>
<td>.001</td>
<td></td>
<td>P</td>
<td>E 25</td>
<td>7</td>
<td>1</td>
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</tr>
<tr>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>U</td>
<td>E 29</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>U</td>
<td>E 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>V 21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>V 21</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>E 23</td>
<td>6</td>
<td>1</td>
<td>.001</td>
<td></td>
<td>P</td>
<td>E 14</td>
<td>20</td>
<td>1</td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>U</td>
<td>E 13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>P</td>
<td>E 7</td>
<td>25</td>
<td>1</td>
<td>P/=.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>V 23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>V 25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>NO</td>
<td></td>
<td></td>
<td>SIGNIFICANT DIFFERENCES</td>
<td></td>
<td>P</td>
<td>NO</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* TP: PTYPE OF SCHOOL  
E - English  
U - Underprivileged  
P - Privileged  
V - Vernacular
in both types of schools use more vernacular in their conversations amongst themselves than English. For purposes of statistical analysis, incidents classified as mixed or those unclassified were omitted, since it was noted by inspection that the frequencies of incidents of these types were very low across all categories.

Using the same information presented in table 4, graphs were drawn. The main interest lay in our finding out whether or not the curves in these graphs will rise or fall as a function of grade level (i.e. grade 1 to 6). In otherwords, does the number of English or vernacular incidents in class rise or fall depending on grade level? Secondly, we wanted to investigate whether or not there is a consistent gap between groups (i.e. the privileged and underprivileged groups) or between conditions (type of lesson) across grade levels. On making some close inspection of the graphs, graphs involving pupil to pupil English incidents; teacher to pupil mixed incidents; pupil to teacher mixed incidents and pupil to pupil mixed incidents in both English and Maths lessons were too low across all categories to permit a meaningful analysis of the data. On the first question the graphs (figure 1 and 2, on pages 47 and 48) show a general rise at least in underprivileged schools in teacher to pupil talking and pupil to teacher talking as one moves from grades 1 to 6 levels. Another feature of the graphs is that there are no clear cut general impressions in the curves for grades 3 or 4.

In teacher to pupil talking and pupil to teacher talking in vernacular there again is no firm indication in the graphs of rises and falls in the curves of these graphs (figure 3 and 4), although
the latter shows a fall in the curve as one moves from grade 1 to 6. Again, as in the other graphs, the lack of a general pattern of the curves of the graphs occurs most prominently around 3/4 grade levels.

As to whether there is a consistent gap between groups or between conditions across grade levels, the curves of the graphs do not offer much evidence. Figure 1 seems to suggest a gap but this gap is not consistent as the curves take different shapes just after grade 2. The only gap that seems worth mentioning is that in teacher to pupil vernacular instruction in both types of lessons where underprivileged schools are observed to be using more vernacular in both types of classes, see figure 3. Another gap emerges from figure 4 where we see vernacular talking depending on the type of lesson. In order that the graphs reveal trends more clearly an attempt was made to group grade levels by pairs. These are presented in figures 1b, 2b, 3b, 4b, and 5b respectively.

The overall picture revealed on the questions attempted in this section on graphs is; as pupils move from grade 1 to 6, graphs 1b and 2b provide some evidence that there is a general upward trend in English with higher grades. The two graphs also show that Maths lessons yielded generally less English than English lessons and that for English lessons privileged school's teachers spoke more English than the underprivileged. The graphs, 1 to 5 are however indicative of a situation where 'changes' in the curves occur at grade 3/4 levels, especially as represented in figures 3b, 4b and 5b below.
Figure 1. Scatter Graph Showing T---P English Scores (English and Maths) in Classroom Instruction from Grade One to Six in Privileged and Underprivileged Government Schools.

**KEY**

Underprivileged/Privileged

- English \( X \) --- \( O \)
- Maths \( X \) ------ \( O \)
Figure 2: Scatter Graph Showing P----T B Scores (English and Maths) in Classroom Instruction from Grade One to Six in Privileged and Underprivileged Primary Government Schools.

KEY

Underprivileged/Privileged

English X ---- X 0 ---- 0
Maths X ---- X 0 ---- 0
Figure 3: Scatter Graph Showing T→P V-Scores (English and Maths) in Classroom Instruction from Grade 1 to 6 in Privileged and Underprivileged Government Schools.

KEY

<table>
<thead>
<tr>
<th>Subject</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Maths</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Underprivileged Privileged

English X——X 0——0
Maths X——X 0——0
Figure 4: Graph Showing P----T V-Scores (English and Maths) in Classroom Instruction from Grade 1 to 6 in Privileged and Underprivileged Government Schools.

**KEY**

<table>
<thead>
<tr>
<th>Underprivileged</th>
<th>Privileged</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>X</td>
</tr>
<tr>
<td>Maths</td>
<td>X</td>
</tr>
</tbody>
</table>
Figure 5: Graph Showing P---V Scores (English and Maths) in Classroom Instructions from Grade One to Six in Privileged and Underprivileged Schools.

**KEY**

<table>
<thead>
<tr>
<th></th>
<th>Underprivileged</th>
<th>Privileged</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>X—X</td>
<td>0—0</td>
</tr>
<tr>
<td>Maths</td>
<td>X—X</td>
<td>0—0</td>
</tr>
</tbody>
</table>

Utterance Incidences

Grade Level
Figure 1.b Graph Showing T----P English Scores (English and Maths) in Classroom Instruction in Pairs of Grade Levels in Privileged and Underprivileged Government Schools.

**KEY**

<table>
<thead>
<tr>
<th></th>
<th>Underprivileged</th>
<th>Privileged</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>X----X</td>
<td>0----------</td>
</tr>
<tr>
<td>Maths</td>
<td>X---------------</td>
<td>X----------</td>
</tr>
</tbody>
</table>

Utterance Incidences

Pairs of Grade Levels
Figure 2.b Graph showing P-

---T E scores (English and Maths Lessons) in Classroom Instruction in Pairs of Grade Levels in Privileged and Underprivileged Government Schools.

Utterance Incidences

KEY

Underprivileged Privileged

English X---X 0---0
Maths X------X 0------0
Figure 3.b: Graph Showing T→P Vernacular Scores (English and Maths Lessons) in Classroom Instruction in Pairs of Grade Levels in Privileged and Underprivileged Government Schools.
Figure 4b: Graph Showing P→T V. Scores (English and Maths) in Classroom Instruction in Pairs of Grade Levels in Privileged and Underprivileged Government Schools.
Figure 5b: Graph Showing P------P V - Scores (English and Maths) in Classroom Instruction in Pairs of Grade Levels in Privileged and Underprivileged Government Schools.

KEY

Underprivileged Privileged

English X 0
Maths X 0

Utterance Incidences
3.2 Proverbs Comprehension: Hypothesis 2.

As to whether belonging to an underprivileged school (where vernacular usage is most prevalent) or a privileged school (where the mandated ZPC is supposed to be in use) has an effect on pupils' comprehension of proverbs, the results show us that the type of school has an effect on performance on a proverbs test. As table 5 below shows, there is larger variance in performance between groups than within groups (i.e. 173.3438 as against 14.6447 respectively). The underprivileged groups' score out of 20 showed a mean of 10.5126 as against the privileged group's mean score of 7.75. This difference in performance was significant (F. Ratio 11.837, F. Probability F.001). On the basis of this finding, the null hypothesis number 2 was rejected.

Cross tabulations across the sexes from the two types of schools show the gender to have had an effect on performance in a proverbs comprehension tests. Males from both types of schools did better than their female counterparts (with means of 10.31 and 7.75 respectively).

Table 5

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>DF</th>
<th>SUM OF SQUARES</th>
<th>MEAN SQUARES</th>
<th>F. RATIO</th>
<th>F PROBABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>BETWEEN GROUPS</td>
<td>1</td>
<td>173.3438</td>
<td>173.3438</td>
<td>11.837</td>
<td>0.001</td>
</tr>
<tr>
<td>WITHIN GROUPS</td>
<td>77</td>
<td>1127.6436</td>
<td>14.6447</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>78</td>
<td>1300.9873</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In order to see whether there was any difference between grade levels across the two types of schools or not, an analysis of variance was performed between Grades five and six. This showed no significant difference between the grades in form of performance on a proverbs comprehension test with means of 8.88 and 9.15 respectively. ($F_{0.05}$, df 1.77, $t = 3.93$, $F$ Ratio, 0.091) (see table 5.2 on p. 59).

3.3 Self-Esteem Hypothesis 3A and 3B

In testing these two hypotheses, both concerned with the question of the extent to which a pupil's self-esteem is related to his language proficiency, the Revised Jains-Field Scale was used to measure self-esteem. This was composed of 20 indicators. These were found rather too many and hence it was decided that these be reduced to fewer components so as to give some underlying dimensions. The first stage involved factor analysing these without any specification of the number of the underlying factors that existed. Seven factors were obtained, 4 of which explained 75% of the variance in Self-esteem. Again it was found difficult to determine the underlying concepts represented by each of the 7 factors. From this the computer was then instructed to give the four best possible
### TABLE 5.2

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>DF</th>
<th>SUM OF SQUARES</th>
<th>MEAN SQUARES</th>
<th>F.RATIO</th>
<th>F PROBABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>BETWEEN GROUPS</td>
<td>1</td>
<td>1.5354</td>
<td>1.5354</td>
<td>0.091</td>
<td>0.757</td>
</tr>
<tr>
<td>WITHIN GROUPS</td>
<td>77</td>
<td>1299.4519</td>
<td></td>
<td>16.8760</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>78</td>
<td>1300.9873</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Factors by the rotation method. After rotation with Kaiser normalization, it was found that the concept of Self-esteem (at least as measured by our instrument) was not unidimensional, with .300 as a cut-off point, four factors where items were highly loaded emerged. These are presented in the Rotated Factor Matrix (see table 6.1). Item number one was highly loaded on both factor three and four. However, since the loading was higher on factor four than on factor three it was moved to fall under factor four. Following the just mentioned table is another table - table 6.2 - which presents the Unrotated Factor Matrix table. The table presents the actual statements comprising the items in the Self-esteem inventory, and the corresponding factor loadings. On the basis of our inferences on what seemed to underly each of the statements falling under one factor concepts for each factor were derived. These are shown in table 6.3 below. It is important to point out though that there is some overlap that defy explanation between the 4 factors conceptually. What seems important is that there is overloading on four factors regardless of how these are conceptualiz
TABLE 6.1 ROTATED FACTOR MATRIX (OBLIQUE) FOR SELF-ESTEEM ITEMS.*

<table>
<thead>
<tr>
<th>FACTOR 1</th>
<th>FACTOR 2</th>
<th>FACTOR 3</th>
<th>FACTOR 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>.521</td>
<td>.044</td>
<td>.174</td>
</tr>
<tr>
<td>2.</td>
<td>.345</td>
<td>.169</td>
<td>.001</td>
</tr>
<tr>
<td>3.</td>
<td>.418</td>
<td>.129</td>
<td>.108</td>
</tr>
<tr>
<td>4.</td>
<td>.462</td>
<td>.077</td>
<td>.296</td>
</tr>
<tr>
<td>5.</td>
<td>.549</td>
<td>.243</td>
<td>.055</td>
</tr>
<tr>
<td>6.</td>
<td>.223</td>
<td>.303</td>
<td>.047</td>
</tr>
<tr>
<td>7.</td>
<td>.160</td>
<td>.338</td>
<td>.113</td>
</tr>
<tr>
<td>8.</td>
<td>.084</td>
<td>.721</td>
<td>.120</td>
</tr>
<tr>
<td>9.</td>
<td>.044</td>
<td>.545</td>
<td>.049</td>
</tr>
<tr>
<td>10.</td>
<td>.076</td>
<td>.372</td>
<td>.020</td>
</tr>
<tr>
<td>11.</td>
<td>.050</td>
<td>.195</td>
<td>.322</td>
</tr>
<tr>
<td>12.</td>
<td>.171</td>
<td>.213</td>
<td>.348</td>
</tr>
<tr>
<td>13.</td>
<td>.124</td>
<td>.037</td>
<td>.297</td>
</tr>
<tr>
<td>14.</td>
<td>.060</td>
<td>.023</td>
<td>.444</td>
</tr>
<tr>
<td>15.</td>
<td>.200</td>
<td>.216</td>
<td>.704</td>
</tr>
<tr>
<td>16.</td>
<td>.053</td>
<td>.060</td>
<td>.022</td>
</tr>
<tr>
<td>17.</td>
<td>.124</td>
<td>.037</td>
<td>.297</td>
</tr>
<tr>
<td>18.</td>
<td>.259</td>
<td>.076</td>
<td>.223</td>
</tr>
<tr>
<td>19.</td>
<td>.103</td>
<td>.019</td>
<td>.053</td>
</tr>
<tr>
<td>20.</td>
<td>.112</td>
<td>.008</td>
<td>.145</td>
</tr>
</tbody>
</table>

*Factor values rounded off to the nearest 3 decimal places.

NB: Squares indicate highly loaded items.
### Table: Unrotated Factor Matrix for Self-Esteem Items

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>FACTOR 1</th>
<th>FACTOR 2</th>
<th>FACTOR 3</th>
<th>FACTOR 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feel that can do nothing better in mother tongue</td>
<td>.085</td>
<td>.158</td>
<td>.293</td>
<td>.296</td>
</tr>
<tr>
<td>Feel that can do work well in mother tongue</td>
<td>.334</td>
<td>.064</td>
<td>.149</td>
<td>.085</td>
</tr>
<tr>
<td>Feel shy in story telling in mother tongue</td>
<td>.452</td>
<td>.047</td>
<td>.107</td>
<td>.031</td>
</tr>
<tr>
<td>Happiness when speaking in audience in mother tongue</td>
<td>.098</td>
<td>.166</td>
<td>.207</td>
<td>.114</td>
</tr>
<tr>
<td>Feel worried in front of audience using mother tongue</td>
<td>.184</td>
<td>.340</td>
<td>.067</td>
<td>.103</td>
</tr>
<tr>
<td>Often feel o.k. talking to classmates in mother tongue</td>
<td>.376</td>
<td>.101</td>
<td>.084</td>
<td>.094</td>
</tr>
<tr>
<td>Troubled with shyness when using mother tongue</td>
<td>.233</td>
<td>.247</td>
<td>.290</td>
<td>.039</td>
</tr>
<tr>
<td>Feeling blessed because of mother tongue</td>
<td>.121</td>
<td>.173</td>
<td>.289</td>
<td>.049</td>
</tr>
<tr>
<td>Feel behind in class because of use of mother tongue</td>
<td>.278</td>
<td>.405</td>
<td>.173</td>
<td>.315</td>
</tr>
<tr>
<td>Feel future bright because of mother tongue</td>
<td>.321</td>
<td>.124</td>
<td>.135</td>
<td>.276</td>
</tr>
<tr>
<td>Feel speaking in class in mother tongue worthless person</td>
<td>.085</td>
<td>.368</td>
<td>.056</td>
<td>.277</td>
</tr>
<tr>
<td>Feel sure of self in use of mother tongue</td>
<td>.525</td>
<td>.268</td>
<td>.044</td>
<td>.076</td>
</tr>
<tr>
<td>Feel dislike self because of use of mother tongue</td>
<td>.368</td>
<td>.437</td>
<td>.407</td>
<td>.108</td>
</tr>
<tr>
<td>Feel person of worth because of mother tongue</td>
<td>.523</td>
<td>.352</td>
<td>.437</td>
<td>.218</td>
</tr>
<tr>
<td>Feel discouraged because of use of mother tongue</td>
<td>.023</td>
<td>.099</td>
<td>.204</td>
<td>.363</td>
</tr>
<tr>
<td>Feel discouraged on deed in mother tongue</td>
<td>.296</td>
<td>.382</td>
<td>.209</td>
<td>.140</td>
</tr>
<tr>
<td>Feel self-conscious in use of mother tongue</td>
<td>.155</td>
<td>.283</td>
<td>.206</td>
<td>.059</td>
</tr>
<tr>
<td>Pride in doing school work in mother tongue</td>
<td>.150</td>
<td>.151</td>
<td>.130</td>
<td>.041</td>
</tr>
<tr>
<td>Feel handled self well in audience when using m.t.</td>
<td>.169</td>
<td>.048</td>
<td>.257</td>
<td>.240</td>
</tr>
<tr>
<td>Feel confident when learning new topic in mother tongue</td>
<td>.410</td>
<td>.193</td>
<td>.202</td>
<td>.293</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of Explained Variance</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>85.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eigen Values</td>
<td>1.66</td>
<td>1.53</td>
<td>1.49</td>
<td>1.39</td>
</tr>
</tbody>
</table>
TABLE: 6.3 VARIABLE NUMBERS AND THEIR ACTUAL CONTENT (i.e. FACTOR NAMES AND CONTENT).

<table>
<thead>
<tr>
<th>VRB Nos</th>
<th>VARIABLE CONTENT (ACTUAL STATEMENTS IN INVENTORY)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FACTOR 1.</strong></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>How often do you feel shy when you are expected to tell story in your m.t.</td>
</tr>
<tr>
<td>4</td>
<td>How often do you feel happy when talking to your friends in class in your m.t.</td>
</tr>
<tr>
<td><strong>SELF-CONSCIOUSNESS</strong></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>How often do you feel that your speaking your mother tongue in class makes you a worthless.</td>
</tr>
<tr>
<td>12</td>
<td>When you discuss ideas in class, how often are you sure of yourself when using mother tongue.</td>
</tr>
<tr>
<td>20</td>
<td>How often do you feel confident when learning a new topic in your mother tongue.</td>
</tr>
<tr>
<td><strong>FACTOR 2.</strong></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>How often do you feel that you can do work well when this is done in your mother tongue.</td>
</tr>
<tr>
<td>5</td>
<td>How often do you feel worried in front of an audience when using mother tongue.</td>
</tr>
<tr>
<td><strong>ACTIVITY INVOLVEMENT</strong></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>How often do you dislike yourself when doing something in your mother tongue</td>
</tr>
<tr>
<td>16</td>
<td>How often do you feel discouraged in your activities when there are in m.t.</td>
</tr>
<tr>
<td>17</td>
<td>How often do you feel Self-conscious of your mother tongue when using it</td>
</tr>
<tr>
<td><strong>FACTOR 3</strong></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>How often do you feel confident talking to your classmates in your m.t.</td>
</tr>
</tbody>
</table>
| 7 | How often are you troubled with shyness because of your mother tongue.
TABLE: 6.3 (continued)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>How often do you feel your future will be bright because of your mother tongue.</td>
</tr>
<tr>
<td>14</td>
<td>How often do you feel you are a person of worth because of your mother tongue.</td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>How often do you feel that there is nothing you can do better in your mother tongue.</td>
</tr>
<tr>
<td>9</td>
<td>How often do you feel that you are behind in class because of your mother tongue.</td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>15</td>
<td>How often do you feel discouraged of your mother tongue.</td>
</tr>
<tr>
<td>18</td>
<td>How often do you feel proud for doing your work in class in your mother tongue</td>
</tr>
<tr>
<td>19</td>
<td>How often do you feel you are handled yourself well in an audience when you are using your mother tongue.</td>
</tr>
</tbody>
</table>

* As they appear in the unrotated matrix in table 6.2
In other words, what the above means is that 20 original measures of Self-esteem were, by way of Factor Analysis collapsed into the four factors named above as they were found to be measuring the same underlying concept, as is shown by the coefficients. From here it was therefore decided that four additive indices of Self-esteem be built. After getting the indices, pupils in each index were dichotomized into high or low, using the mid point of the index as a cut off point. Finally, comparisons of t-test of means (on the proficiency tests) of those subject who were low and those who were high on each of the indices were made. The four indices had the following scales:

<table>
<thead>
<tr>
<th></th>
<th>High</th>
<th>Md Pt</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Con</td>
<td>20</td>
<td>14.125</td>
<td>8</td>
</tr>
<tr>
<td>Act Lving</td>
<td>18</td>
<td>13.00</td>
<td>7</td>
</tr>
<tr>
<td>Self Dip</td>
<td>19</td>
<td>9.613</td>
<td>5</td>
</tr>
<tr>
<td>Self Ef</td>
<td>19</td>
<td>13.162</td>
<td>5</td>
</tr>
</tbody>
</table>

Unfortunately, there were no differences between 'high' and 'low' subjects on the four indices with regard to their performance on the proficiency tests. All the performed t-tests of means on this test showed no significant differences. As a result it was decided to re-examine the Self-esteem items once again. This time, instead of the items being factor analysed, each subject's total response mark on the twenty items was recorded. These total scores from both types of schools, privileged and underprivileged were then arranged in order of magnitude and the median was then calculated. Using the median as a cut off point pupils were then dichotomized into low and high. Finally, comparisons of t-test of means (on the proficiency tests) of those subjects who were low and those who were high were m
The results are presented in table 7 below.

Table 7. T-test of Means on the Proficiency Tests of Low and High Self-Esteem Subjects

<table>
<thead>
<tr>
<th></th>
<th>High S-esteem</th>
<th>Low S-esteem</th>
<th>T. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. Writing</td>
<td>2.5</td>
<td>1.6</td>
<td>3.781*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(df=78)</td>
</tr>
<tr>
<td>V. Writing</td>
<td>2.5</td>
<td>2.0</td>
<td>1.52</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(df=78)</td>
</tr>
<tr>
<td>E. Reading</td>
<td>1.2</td>
<td>0.82</td>
<td>3.18 **</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(df=78)</td>
</tr>
<tr>
<td>V. Reading</td>
<td>1.2</td>
<td>1.6</td>
<td>1.476</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(df=78)</td>
</tr>
<tr>
<td>E. Comp.</td>
<td>12.0</td>
<td>12.9</td>
<td>1.75***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(df=78)</td>
</tr>
<tr>
<td>V. Comp.</td>
<td>9.8</td>
<td>9.5</td>
<td>1.34</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(df=78)</td>
</tr>
</tbody>
</table>

* P < .01
** P < .005
*** P < .05

As the table shows the hypothesis (3A) that pupils' performance in English proficiency tests of reading, writing and comprehension will be negatively correlated with measures of their Self-esteem was disconfirmed. The alternative hypothesis on the other hand that Self-esteem is tied to social values including the high prestige of English and that skills in English will be positively related to Self-esteem, irrespective of skills in pupil's vernacular languages on the whole was confirmed, except for English comprehension.

We learn from the table that 'high esteem' subjects performed
significantly better than 'low esteem' subjects in the English language skills of writing and reading ($T=3.781$, df 78, $t$-Probability $= 2.358 P < .01$; $T = 3.18$, df 78, $t$-Probability $= 2.617 P < .005$ respectively). On the other hand, there were no significant differences between the two groups' performances in the same skills in vernacular. What this means therefore is that pupils' self-esteem is tied to the social values that they attach to the high prestige of English, and consequently their skills in English are positively related to their high self-esteem, irrespective of their skills in the vernacular languages.

3.4 Relationship Between Vernacular and English Proficiency: Hypothesis No. 4.

Hypothesis 4 attempted to test whether there will be a positive correlation in performance between pupils' vernacular language skills in reading, writing and understanding, and English language skills in the same. In testing this hypothesis, the results were analysed by correlating performance between English and Vernacular scores in the three language skills of writing, reading and comprehension. The table below (table 8) shows there were very negligible correlations in performance between reading, writing and comprehension skills between the two languages in both types of schools. The only exception was in the privileged schools where there is a somewhat positive correlation between English and Bemba in the writing skill. On the whole therefore the null hypothesis has been accepted.
TABLE 3

SUMMARY TABLE OF CORRELATIONS OF PERFORMANCE BETWEENVERNACULAR
AND ENGLISH SKILLS IN PRIVILEGED AND UNDERPRIVILEGE SCHOOLS.

<table>
<thead>
<tr>
<th>SKILL</th>
<th>UNDERPRIVILEGED</th>
<th>PRIVILEGED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>Significance</td>
</tr>
<tr>
<td>READING</td>
<td>- 0.0022</td>
<td>.495*</td>
</tr>
<tr>
<td>WRITING</td>
<td>.0592</td>
<td>.358*</td>
</tr>
<tr>
<td>COMPREHENSION</td>
<td>.0479</td>
<td>.318*</td>
</tr>
</tbody>
</table>

* - NOT SIGNIFICANT.
** - JUST ABOUT SIGNIFICANT.

3.5 Parental Attitude and Child Language Proficiency: Hypothesis 5.

The hypothesis tested here was whether or not there will be a relationship between pupils relative performance in English compared to vernacular in the language skills of comprehension, reading and parents' attitudes towards the two languages respectively. After a preliminary analysis of the items in the parental questionnaire, it was discovered that the original attitude scale on English was in fact composed of two types of questions viz: those dealing with parents actual attitudes towards English Vs Vernacular and those dealing with their usage of the language. Hence the following scales: Pro-English Attitude Scale and the Pro-English Usage Scales respectively. Below is a summary of the assumptions of performance made. In testing this hypothesis the Pearsons correlation coefficients were calculated on the following.
TABLE 9: Parental Attitude to Zambia Language/English

<table>
<thead>
<tr>
<th>Pro-English Attitude Scale</th>
<th>Pro-Zambian Language Atti-Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Those who are favourable</td>
<td>(Those who are favourable towards</td>
</tr>
<tr>
<td>towards English)</td>
<td>Z. Language</td>
</tr>
<tr>
<td>Child's English Proficiency: Higher</td>
<td>lower</td>
</tr>
<tr>
<td>Child's Zambia Language Proficiency: Lower</td>
<td>higher</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pro-English Usage Scale</th>
<th>Pro-Zambian Language Usage Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>(those who use more English</td>
<td>(Those who use more vernacular</td>
</tr>
<tr>
<td>than the vernacular)</td>
<td>than English)</td>
</tr>
<tr>
<td>Child's English Prof</td>
<td>lower</td>
</tr>
<tr>
<td>Child's Zambia Language Prof. lower</td>
<td>higher</td>
</tr>
</tbody>
</table>

a. Correlation between Parent's Attitude towards the English language and parent's use of the language i.e. Attitude Scale (Att scale) by Usage Scale (Uscale).
b. Pupil's English Comprehension score by Parents Attitude Score i.e. English Comprehension by Attitude scale.
c. Pupils Vernacular Comprehension score by Parents Attitude Score i.e. Vernacular Comprehension by Attitude scale.
d. Parent's Usage Scale Score by Pupils English Comprehension Score i.e. Vernacular scale by English Comprehension.
e. Parents Usage Score by Pupils' Vernacular comprehension Score i.e. Vernacular scale by Vernacular Comprehension.

The results of these comparisons are presented in table 9b below.

The results in the table show that there is a positive correlation between parents attitude towards language and the extent to which they use this language ($r = .3767$, df 1, 38 $P < .01$; $r = .5857$, df 1, 38 $P < .001$, in both underprivileged and privileged groups respectively). An interesting finding however is that parents usage of English, unlike their attitudes towards it correlated positively with their children's English and vernacular comprehension.
performance in underprivileged schools \( r = .468, \) df 1,38 \( P < .001; \) \( r = .323, \) df 1,39, \( P < .02 \) respectively). This suggests, at least for underprivileged subjects, that whether or not parents use the language is more important than their attitude towards that language as far as influencing their children's ability in the same is concerned. It seems paradoxical however that this is so in underprivileged subjects where we are told in table 19 on p. 144 that subjects' parents used relatively very little English than those in the privileged schools. As for privileged subjects, there was a negative correlation between their vernacular comprehension and their parents use of English \( r = -.32, \) df 1,39 \( P < .02 \). This is quite plausible since parents' frequent use of English would logically affect these pupils' grasps of the vernacular, a picture that emerges from the result that pupils in privileged schools did better than their counterparts in English comprehension, whilst the converse is the case for underprivileged subjects, (See tables 11.1a and 11.1b on p. 78) suggesting that attitudes can not be discounted completely. Pupil's English comprehension again correlated positively with their parents attitudes towards English. This explains why the difference in terms of performance between the two groups was larger in English comprehension than vernacular comprehension. That is, besides the parents' pro-English usage their attitudes also played a part. For underprivileged subjects it was the little English that the parents used that accounted for their performance. (See the mean scores of performance in the two languages between the two groups on table 13 on p. 82).

With regard to reading tests the only significant correlations, and these were negative, were found between pupils' English reading
and their parents' attitude towards English and pupils vernacular reading and their parents' usage of English \( r = -0.35, \text{ df } 1,38 \ P \leq 0.01 \) and \( r = -0.23, \text{ df } 1,58 \ P \leq 0.08 \) respectively) see table 9b. The finding therefore that underprivileged subjects did better than privileged ones in English and vernacular reading (see table 13) can not be explained in terms of parental attitudes and usage of English. The fact that reading and writing are not common happenings in homes could account for the reason why parental attitudes and usage of English are so divorced from these. It would appear that rather than what they are reading or writing what is important in influencing pupils' most is their parents' speech.

3.5.1 Performance Between Privileged and Underprivileged Schools

One of the implications in hypothesis five was that pupils performance in the language skills of comprehension, reading and writing in both English and vernacular will be influenced by the attitudes of these pupils parents towards each of the two languages; pupils will tend to perform relatively better in the language most favoured by their parents' attitudes. One way of approaching this question was to initially make comparisons between the two groups of subjects (underprivileged and privileged subjects) in the language skills involved and thereafter relate the results from here with parents attitudes to either of these languages.

The following tables (10.1a 10.1b, 10.2b, 10.3a, 10.3b, 11.1a, 11.1b, 11.2a, 11.2b, 11.3a, 11.3b) dealt with comparisons between the two types of schools on the following
TABLE 9b: SUMMARY TABLE OF CORRELATIONS BETWEEN PARENTS USAGE AND ATTITUDE SCALES AND PUPILS' ENGLISH AND VERNACULAR PROFICIENCY.

<table>
<thead>
<tr>
<th>CORRELATION</th>
<th>UNDERPRIVILEGED</th>
<th>PRIVILEGED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P. Coefficient</td>
<td>Significance</td>
</tr>
<tr>
<td>ATT. SCALE BY USCALE</td>
<td>+ .3767</td>
<td>.009*</td>
</tr>
<tr>
<td>ATTS SCALE BY ECOMP</td>
<td>-.0662</td>
<td>.359</td>
</tr>
<tr>
<td>ATTS SCALE BY VCOMP</td>
<td>.013</td>
<td>.469</td>
</tr>
<tr>
<td>USCALE BY ECOMP</td>
<td>+ .468</td>
<td>.001*</td>
</tr>
<tr>
<td>USCALE BY VCOMP</td>
<td>+ .323</td>
<td>.02</td>
</tr>
<tr>
<td>E-READING BY ATTS SCALE</td>
<td>-.3531</td>
<td>.014</td>
</tr>
<tr>
<td>V-READING BY ATTS SCALE</td>
<td>-.19</td>
<td>.115</td>
</tr>
<tr>
<td>E-READING BY USCALE</td>
<td>-.017</td>
<td>.146</td>
</tr>
<tr>
<td>V-READING BY USCALE</td>
<td>-.23</td>
<td>.081</td>
</tr>
</tbody>
</table>

*Significant

NB: E-English
    V-Vernacular
1. English Reading Test Scores by a, Group b, Sex c, Grade Level.
2. Vernacular Reading Test Scores by a, b and c.
3. English Comprehension Test Scores by a, b and c.
4. Vernacular Comprehension Test Scores by a, b and c above.

Results of ONEWAY analysis of variance of the dependent measure in table 10.1a showed significant differences between privileged and underprivileged schools for English Reading Test Scores. (F.01, df 1,77 ≥ ± 6.58) Suprisingly enough, subjects from the underprivileged schools did better than those from the privileged. As for vernacular scores there was no significant difference between the two groups as in shown in table 10.1b and table 13 ahead.

The results in table 10.2a and 10.2b on P.74 show us that the gender had no impact on performance in an English and vernacular reading tests. There was no difference in performance between males and females. The observation is further supported by the differences in the amount of variance explained within groups than across groups (i.e. 51.6226 for English and 0.0012 for Vernacular, and .9295 and .1192 respectively). See also summary table 13.

Table 10.3a and 10.3b on P.75 indicate that the grade level factor more than the sex factor we saw above had an effect on pupils performance on English reading test. But suprisingly grade 5s did better than the grade 6 pupils with means of = 1.24, and = 0.77 respectively (see also table 13). This difference was significant (F.01, df 1,77 ≥ ± 6.58) The picture is however
Table 10.1a: Oneway Analysis of variance of English and Vernacular Reading Scores respectively Between Underprivileged and Privileged Schools respectively.

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of square</th>
<th>Mean of Square</th>
<th>F. Ratio</th>
<th>F. Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups (Priv. vs Underpriv)</td>
<td>5.1194</td>
<td>5.1194</td>
<td>8.476</td>
<td>.01*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>46.5049</td>
<td>.6040</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>51.6238</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 10.1b.

*F_{0.01}, df 1/77 ≥ ± 6.58

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of square</th>
<th>Mean of Square</th>
<th>F. Ratio</th>
<th>F. Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups (Priv vs Underpriv)</td>
<td>.3001</td>
<td>.3001</td>
<td>.324</td>
<td>.578</td>
</tr>
<tr>
<td>Within Groups</td>
<td>71.3908</td>
<td>.9772</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>71.6909</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 10.2a: One-way analysis of Variance of Differences of Performance in (a) English and (b) Vernacular Reading Tests Respectively, Between Sexes Combining Underprivileged and Privileged Schools

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>Mean of Squares</th>
<th>F. Ratio</th>
<th>F. Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups (Males vs Female)</td>
<td>.0012</td>
<td>.0012</td>
<td>.002</td>
<td>.918**</td>
</tr>
<tr>
<td>Within Groups</td>
<td>51.6226</td>
<td>.6704</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>51.6238</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 10.2b

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>Mean of Squares</th>
<th>F. Ratio</th>
<th>F. Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups (Males vs Female)</td>
<td>.1192</td>
<td>.1192</td>
<td>.128</td>
<td>.720</td>
</tr>
<tr>
<td>Within Groups</td>
<td>71.5412</td>
<td>.9295</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>71.6909</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** - not significant
Table 10.3a: Oneway Analysis of Variance of Differences of Performance in English and Vernacular Reading Test Respectively Between Grade Levels 5 and 6 Combining Underprivileged and Privileged Schools

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>Mean of Squares</th>
<th>F. Ratio</th>
<th>P. Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups (Grade 5 vs Grade 6)</td>
<td>4.3288</td>
<td>4.3288</td>
<td>7.048</td>
<td>.01**</td>
</tr>
<tr>
<td>Within Groups</td>
<td>47.2950</td>
<td>.642</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>51.6288</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 10.3b

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>Mean of Squares</th>
<th>F. Ratio</th>
<th>P. Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>.0651</td>
<td>.0651</td>
<td>.070</td>
<td>.781</td>
</tr>
<tr>
<td>Within Groups</td>
<td>71.6257</td>
<td></td>
<td>.9302</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>71.6909</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** - Significant
shows that there was no significant difference between the grade levels from both types of schools.

In table 11.1a we are shown that there was a marked difference between privileged and underprivileged schools on the English comprehension test. Subjects in the privileged schools did better than those in underprivileged schools. The case with the vernacular comprehension test was different. Although subjects in the underprivileged seemed to have done better than their colleagues in the other type of school, this difference was not significant enough to warrant a distinction between the two types of schools in terms of performance. This conclusion is further verified by the maximum performance, out of 20, each group had. The underprivileged maximum was 20 as compared to the privileged's 19. (See table 11.1b). An analysis of variance for English and vernacular comprehension test scores between males and females from the two types of schools showed a weak support for any significant differences across sexes (from the combination of privileged and underprivileged schools. \((M_x = 13.0151; F_x = 12.48)\) (See table 11.2a and 11.2b). As we go through this section of the report, it will be noticed that for tables 5, 5.1, 5.2, 10.1, 10.2, and 10.3, 11.1, 11.2/11.3 the most ideal statistical tool would have been a MANOVA \((2 \times 2 \times 2)\). This would have permitted an assessment of whether factors of sex, grade level and type of school interact. In addition, this would have made easier the task of making comparisons of performance on the language skills in question in terms of sex and grade level factors. Unfortunately, the SPSS
package currently in use at the University of Zambia does not contain a MANOVA SUB. Instead, we computed the ANOVAS to permit us to make assessments in terms the differences between groups (i.e. underprivileged vs privileged) and differences in terms of sex and grade level across both groups (i.e. both groups combined). In the vernacular comprehension test the grade level factor was important in influencing performance. Grade 6 did better than grade 5 with means of 13.025 and 7.0 respectively). An analysis of variance found this difference to be significant \( F_{(1,77)} = 51.357, \ p < .001 \). As for performance in the English comprehension test with regard to the grade level factor, a significant difference was provided by the ONEWAY \( F_{(4,681)} = 59.8560, \ p < .032 \) See table 11.3a on p.80.

In addition to the obtained results referred to so far, some information was collected from unstructured interviews of pupils and teachers. In addition, from the parents questionnaire in each group information was compiled concerning the percentage of parents in professional clerical occupations; percentage of parents in other low occupations or engaged in self-employment; mean parental English usage score and the mean number of years of schooling of parents. This information is presented in table 13. On the whole pupils' parents from privileged schools, were better than their counterparts on the six dimensions just mentioned above (i.e. more parents in professional clerical occupations, lower percentage of parents in paid employment, a higher mean of English usage score and
Table 11.1a  One way Analysis of Variance of Differences in Performance Between Underprivileged and Privileged Schools in (a) English and (b) Vernacular Comprehension Tests Respectively.

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>Mean of Squares</th>
<th>F. Ratio</th>
<th>F. Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups (Privileged vs Underprivileged)</td>
<td>180.0073</td>
<td>180.0073</td>
<td>16.034</td>
<td>.001*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>864.4231</td>
<td>11.2263</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,044.4304</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 11.1b

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>Mean of Squares</th>
<th>F. Ratio</th>
<th>F. Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>80.9744</td>
<td>80.9744</td>
<td></td>
<td>0.057*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1710.9750</td>
<td>22.2205</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1791.9494</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant
Table 11.2a: One way Analysis of Variance of Differences in Performance Between Males and Females Combining Underprivileged and Privileged Schools in (a) English and (b) Vernacular Comprehension Tests respectively.

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>Mean of Squares</th>
<th>F.Ratio</th>
<th>F. Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups (Male Vs Females)</td>
<td>6.5579</td>
<td>6.5579</td>
<td>.487</td>
<td>.495*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1037.8724</td>
<td>13.4789</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1044.4304</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 11.2b

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>Mean of Squares</th>
<th>F.Ratio</th>
<th>F. Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>11.3750</td>
<td>11.3750</td>
<td>.492</td>
<td>.492*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1780.5744</td>
<td>22.1243</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1791.9494</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* = not significant
<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F. Ratio</th>
<th>P. Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups (Grade 5) vs Grade 6)</td>
<td>59.8560</td>
<td>984.5744</td>
<td>10.44</td>
<td>.001</td>
</tr>
<tr>
<td>Within Graphs</td>
<td>12.7867</td>
<td>716.9750</td>
<td>51.357</td>
<td>13.9867</td>
</tr>
<tr>
<td>Total</td>
<td>716.9750</td>
<td>1074.9744</td>
<td>1791.9494</td>
<td></td>
</tr>
</tbody>
</table>

Table 11.3a

* = Significant
a higher mean number of years of schooling). One can notice for instance that pupils in underprivileged schools only had 47.5 per cent of their parents in paid employment as compared to 87.5 in the privileged schools. The contrast in the percentages of parents with no paid employment between privileged and underprivileged schools is alarming; 12.8 against 52.5 per cent.

3.6 Teachers' and Pupil interviews

Two teachers, both of whom had about 19 years of teaching experience at primary level were selected from the two types of Schools for the interview. This consisted of a wide range of questions categorised thus:

(i) Medium of instruction
(ii) The situation of vernacular in schools and teacher training colleges and
(iii) pupils' literacy skills.

From the pupils involved in the study were obtained information mainly concerning the ease or difficulty with which they did the tests on the skills between Bemba and English. Finally, general observations were made in classroom teaching of the following selected number of lessons at different grade levels.

Table 12: Observed Lessons at different Grade Levels.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Subject</th>
<th>Grade</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Maths</td>
<td>1</td>
<td>English/Maths/Reading</td>
</tr>
<tr>
<td>1</td>
<td>English Reading</td>
<td>3</td>
<td>English/Maths</td>
</tr>
<tr>
<td>3</td>
<td>E. Language</td>
<td>4</td>
<td>English/Maths</td>
</tr>
<tr>
<td>4</td>
<td>English Reading</td>
<td>5</td>
<td>Speech Work</td>
</tr>
<tr>
<td>5</td>
<td>Maths</td>
<td>6</td>
<td>English/Maths</td>
</tr>
<tr>
<td></td>
<td>Maths/English</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE 13.0
Summary Table of mean scores* on tests

<table>
<thead>
<tr>
<th></th>
<th>English Comp.</th>
<th>Vernacular Comp.</th>
<th>English Reading</th>
<th>Vernacular Reading</th>
<th>English Writing</th>
<th>Vernacular Writing</th>
<th>Proverb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males (all grades)</td>
<td>(11.8)</td>
<td>(14.2)</td>
<td>(1.8)</td>
<td>(1.6)</td>
<td>(2.7)</td>
<td>(2.9)</td>
<td>(11.5)</td>
</tr>
<tr>
<td>Females (all grades)</td>
<td>(10.8)</td>
<td>(10.2)</td>
<td>(1.4)</td>
<td>(1.5)</td>
<td>(2.2)</td>
<td>(2.1)</td>
<td>(9.2)</td>
</tr>
<tr>
<td>Grade 5</td>
<td>(9.9)</td>
<td>(7.5)</td>
<td>(1.7)</td>
<td>(1.4)</td>
<td>(2.8)</td>
<td>(2.2)</td>
<td>(10.1)</td>
</tr>
<tr>
<td>Grade 6</td>
<td>(12.8)</td>
<td>(14.8)</td>
<td>(1.9)</td>
<td>(1.8)</td>
<td>(2.5)</td>
<td>(2.4)</td>
<td>(10.6)</td>
</tr>
<tr>
<td>Underprivileged Grand Means</td>
<td>(11.3)</td>
<td>(11.2)</td>
<td>(1.9)</td>
<td>(1.5)</td>
<td>(2.2)</td>
<td>(2.2)</td>
<td>(10.52)</td>
</tr>
<tr>
<td>Males (all grades)</td>
<td>(14.4)</td>
<td>(8.9)</td>
<td>(1.7)</td>
<td>(1.9)</td>
<td>(1.5)</td>
<td>(2.1)</td>
<td>(8.2)</td>
</tr>
<tr>
<td>Females (all grades)</td>
<td>(14.2)</td>
<td>(9.6)</td>
<td>(1.8)</td>
<td>(1.3)</td>
<td>(1.6)</td>
<td>(1.9)</td>
<td>(6.8)</td>
</tr>
<tr>
<td>Grade 5</td>
<td>(14.0)</td>
<td>(6.5)</td>
<td>(1.9)</td>
<td>(2.2)</td>
<td>(1.6)</td>
<td>(2.6)</td>
<td>(8.4)</td>
</tr>
<tr>
<td>Grade 6</td>
<td>(14.9)</td>
<td>(11.6)</td>
<td>(1.6)</td>
<td>(1.4)</td>
<td>(1.5)</td>
<td>(1.7)</td>
<td>(6.5)</td>
</tr>
<tr>
<td>Privileged Grand Means</td>
<td>(14.3)</td>
<td>(9.1)</td>
<td>(1.70)</td>
<td>(1.8)</td>
<td>(1.8)</td>
<td>(1.9)</td>
<td>(7.75)</td>
</tr>
</tbody>
</table>

*Rounded off to one decimal place.
<table>
<thead>
<tr>
<th>Description</th>
<th>Privileged school</th>
<th>Underprivileged school</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of parents in professional - clerical occupations</td>
<td>42.2%</td>
<td>12.0</td>
</tr>
<tr>
<td>% of parents in other 'low' status/ income occupations</td>
<td>45%</td>
<td>35.5</td>
</tr>
<tr>
<td>% of parents in unpaid employment/ self employed</td>
<td>12.8%</td>
<td>52.5</td>
</tr>
<tr>
<td>Mean parental English usage score</td>
<td>8.95</td>
<td>7.875</td>
</tr>
<tr>
<td>Mean no. of years of schooling of father</td>
<td>9.015</td>
<td>5.97</td>
</tr>
</tbody>
</table>

* Teachers, higher ranking nurses, miners, low ranking, marketeers etc.
### Table 15

Summary Table of Results of Differences in Performance Between Groups

<table>
<thead>
<tr>
<th>GLOBAL READING</th>
<th>GLOBAL WRITING</th>
<th>COMPREHENSION</th>
<th>INCIDENTS OF INSTRUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>v</td>
<td>??</td>
<td>v</td>
<td>v</td>
</tr>
</tbody>
</table>

**Underprivileged**

**Privileged**

**NB:**
- > - more than
- >* - more than but difference not significant
- ?? - no difference, both important
<table>
<thead>
<tr>
<th></th>
<th>Global Reading</th>
<th>Comprehension</th>
<th>Proverbs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>English vs Verna.</td>
<td>English</td>
<td>Vernacular</td>
</tr>
<tr>
<td>Sex</td>
<td>A</td>
<td>A</td>
<td>V</td>
</tr>
<tr>
<td>Grade</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>A*</td>
<td>?</td>
<td>A*</td>
</tr>
<tr>
<td>Grade</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NB:** ** - Underprivileged
?
- Equal both not important

A - Underprivileged

B - Privileged

?? - no difference, both important
The number of periods allocated to either Bemba or English lessons was collected from school time tables for each of the schools. On the average, this is the picture that emerged. No specific and convincing reason was given by teachers nor their heads to explain why Bemba was only taught at grade 3/4 levels in privileged schools.

Table 16: No. of periods per week allocated for Bemba* and English lessons in the two types of schools.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Underprivileged</th>
<th>Privileged</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>English</td>
<td>Bemba</td>
</tr>
<tr>
<td></td>
<td>Reading</td>
<td>Language</td>
</tr>
<tr>
<td>1</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>9/10</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>9</td>
<td>5</td>
</tr>
</tbody>
</table>

*As will be made clear later, most of the "teaching" of Bemba involves reading story books, story telling by either the pupils or the teacher and proverbs interpretation.

Teachers Interviews

It was the teacher's contention that the position of the vernacular languages was really a sad one. The prescribed methods in teaching the vernacular, at least in the initial stages are the same as those for English: controlled writing, spelling, reading and so on, and the same skills are expected to be acquired at the
was reported to be very difficult to accomplish.

At college, according to the teachers, all Zambian staff learn Zambian languages (ZL) although they all end up 'failing' the course as it is reported to be the most difficult course encountered there. As a result, the common reported practice is that the passing mark is usually brought down to let teachers go through! Whether these teachers are speakers of the vernacular language involved or not, they are expected to teach it as long as they are the native speakers of that language, a view already noted by Chimuka (1978, in Moody, 1981), that in most cases teachers are still asked to teach ZLs merely because they are native speakers of a particular language. Moody tells us that because of the fact that most of the ZL (Zambian Language) teachers are specifically trained to teach English, Maths a.s.o, demands are placed on their time and this reinforces the casual attitudes of some school administrators towards ZL teaching: "any one can teach his L1 and that doing so does not require any amount of preparation comparable to that in other subjects" (p. 18).

The teachers also reported that in the initial 3 to 4 stages, pupils do most of the work in English orally because written work is reportedly found to be difficult. As a result pupils usually find difficulties at examinations where they are expected to do some writing. The teachers also generally observed that English was better taught than vernacular (in this case Bemba). As noted earlier, the prescribed methods are usually not followed as most of the teaching of Bemba simply involves reading and story telling. During the first grades Bemba is not taught to a lesser degree. The result of this, according to the teachers,
in terms of writing, in their mother tongue because they are 'used' more to English than their mother tongue. As tables 17 and 18 will indicate, this was also confirmed in the reasons given by students for perceiving English reading and writing to be easier than when this was done in their mother tongue.

The teachers also reported that ZLs "went down" after the introduction of the ZPC because prior to its introduction, at grade 3, a pupil was capable of writing a good letter in his mother tongue. The teachers also criticised the ZPC as being too detailed for the time allocated. Because of this same factor, they noted that in most cases language activities that are prescribed are not done with this resulting in activity-oriented lessons often being dull. The ZLs on the other hand either lack text books or the number of books available is often not specified. This was evidenced in the ZL lessons offered at grades 3 or 4, where the teachers devise their own teaching schemes using different Bemba source books and yet the examinations, at the end of pupils' ZPC, are set from Lusaka.

As asked on how they overcome the reported problems of the English medium instruction, almost all those interviewed reported that since English was the pupils' second language being encountered for the first time by the pupil, and the fact that what pupils learned in ZPC did not quite correspond with or cater for the materials found in other courses, resort to instruction in vernacular often seemed inevitable. This is mostly done by way of translations of words and sentences.

Finally, there was a strong feeling from those interviewed that most pupils at grade 6 level experience unspecified language handicaps
and as a result are incapable of expressing themselves freely. This was attributed to lack of opportunities offered in the schools and classroom environments in particular, for pupils to practice this. The ZPC was also partly blamed as it was reported not to give pupils opportunities to make their own constructions as there is too much guiding.

Whether English should be used as a medium from grade 1 or whether a vernacular should be used in the initial stages before it is replaced by English two options were strongly favoured for the already noted reason that is was impossible to teach entirely in the English medium. The two options were:

a) mixed instruction, where English and a vernacular are used side by side and

b) vernacular medium in the first 3/4 grades and a gradual shift to English medium thereafter.

_Pupils' Tests' Post-Mortem_

Here pupils were asked which, between English and Bemba was easier to write or read than the other, and were asked to give reasons for their responses. From these responses were calculated percentages of subjects from each type of school who thought the tests of reading or writing were either easier in English or Bemba. The reasons given fell into four categories viz:

(i) familiarity with the material

(ii) the other language difficult.

(iii) because it is my language.

(IV) no reason.

Under familiarity were subsumed such responses as, ' I am used to
English and not Bemba' a.s.o. Under the second category, pupils mostly responded by simply saying they found the other language difficult. Under the third, pupils simply reported that they found Bemba easier because it was their mother tongue. The results of these are presented in the following tables, 17 and 18. As table 17 below shows, most pupils in underprivileged schools thought reading English, unlike writing it was easier. The reasons offered were given in terms of the pupils familiarity with the material. More students however thought writing Bemba was easier than writing English with the reason being that Bemba was their mother tongue. In privileged schools pupils on the whole thought English reading and writing were easier than were Bemba (70%, 75% and 30% respectively). In the fourth category of the possible reasons given familiarity with the material came out prominently, 30% in all for English, while for Bemba tests most of the students declined to give any reasons or gave 'improper' reasons such as the language was their mother tongue. There were two most notable outcomes from these results: most students, whether from privileged or underprivileged schools, thought English reading and writing was easier because they studied/learnt it at school. On the other hand, 65% of students in underprivileged schools thought Bemba was easier to write than English.

3.7 Classroom Observations by Grade.

Grade I. Reading. The general practice observed in both types of schools was that pupils are first shown single words on pieces of paper and are asked to verbally reproduce these in unison. It was discovered that pupils had simply memorized these words because
TABLE 17

PUPILS PERCEPTIONS OF THE EASINESS OF THE READING AND WRITING TESTS BETWEEN ENGLISH AND BEMBA IN UNDERPRIVILEGED SCHOOLS.

<table>
<thead>
<tr>
<th></th>
<th>ENGLISH READING WRITING</th>
<th>BEMBA READING WRITING</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Ss Totals</td>
<td>28 14</td>
<td>12 26</td>
</tr>
<tr>
<td>% out of 40</td>
<td>70 35</td>
<td>30 65</td>
</tr>
<tr>
<td><strong>REASONS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Familiarity</td>
<td>38.5</td>
<td>0</td>
</tr>
<tr>
<td>% The Other Difficult</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>% Because is Mother Tongue</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>% No Reason Offered</td>
<td>51.5</td>
<td>75</td>
</tr>
</tbody>
</table>
### Table 18

Pupils' perceptions of the easiness of the reading and writing tests between English and Bemba in privileged sch.

<table>
<thead>
<tr>
<th>Reasons</th>
<th>English Reading</th>
<th>Writing</th>
<th>Bemba Reading</th>
<th>Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Ss TOTALS</td>
<td>28</td>
<td>30</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>% out of 40</td>
<td>70</td>
<td>75</td>
<td>30</td>
</tr>
<tr>
<td>% Familiarity</td>
<td>30</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>% The Other Difficult</td>
<td>5</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>% Cos My Mother Tongue</td>
<td>0</td>
<td></td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>% No Reason Offered</td>
<td>65</td>
<td></td>
<td>88</td>
<td></td>
</tr>
</tbody>
</table>
represented by these words, there was total failure. For instance, when some pupils were asked to assign the cards boy and girl to the appropriate objects, there was either partial success or total failure suggesting that pupils memorize these words without knowing what the words represented. The same was observed for short sentences: when pupils were given say, three known words to construct a short sentence e.g. "Is Mulenga This", there was almost total failure when it came to something they have never come across before.

**MATHS**

The subject was mostly taught in Bemba. Although pupils are not able to speak English they understood simple instructions.

**Grade 3 English**

Like at the grade 1 level, although with slight variations, most of the work here still involved alot of memorization. Pupils were able to construct short sentences when asked by the teacher, especially when the teacher took an item and asked the pupil thus: T. what is this? P. That is my pencil. But when pupils were asked to construct simple short sentences from actions there was total failure.

**Grade 4 English:** Guided sentence construction here proved successful except that when pupils are asked to respond to material in unison, alot of individual problems were hidden, especially as concerned pronunciation. At this level however, pupils are still not able to speak English on their own initiative. The little English there is involved only one word responses to teachers' questions.
Grade 5 English. At this stage pupils were able to understand instructions in English and construct simple sentences. Although they could easily read and write they could not express themselves freely in English.

Grade 6 English. Most of the work was done orally. The most common exercises were guided sentence construction, and this was found to be effectively done. In addition, at the researchers intervention it was discovered that pupils were able to understand and even construct sentences in English from demonstrated acts in class. Pupils seem to grasp some English here.

In most Maths lessons, the teacher often does the talking, and the nature of the material usually dictates the medium of the responses the pupils give e.g. what is the formula for breadth? area over length.

General Observations

There is very little English in the schools being spoken by primary school pupils. The little English spoken is that initiated by the teachers and this usually involves responses by pupils to teachers' questions on what they are learning. As much as possible, teachers try to use English medium instruction although they find this impossible to do in most cases. They find resort to vernacular instruction inevitable and particularly rewarding, especially with lower grades where it was generally discovered that pupils were not able to read without pictures. Lessons that are supposed to be activity oriented were often dull, because pupils are not able to express themselves freely in English
the teacher is left to do most of the talking. Although at grade 3 and 4 pupils are able to read, they however do not know what they are reading, suggesting that most of what they read is mostly memorized.
CHAPTER 4

4.0 DISCUSSION

4.1 The medium of instruction and Pupils Level of Literacy.

The aim of this study was basically to document what is going on in the Primary Schools vis a vis the medium of instruction and to make an assessment of the standard of pupils' language proficiency (in English as well as Bemba). It was in essence an examination of the efficacy of the Zambian Primary Course (ZPC) as conceived by McAdam in his Ph.D Thesis. Among its several components is the one (and this is in fact what government policy is) that says English besides being learnt as a subject in the curriculum should be used as a medium of instruction immediately a child enters school. In the introductory section of this paper were outlined the envisaged advantages of such a scheme. Issues were mainly investigated with regard to another proposed alternative system that advocates that English should be learnt as a subject for the first three or four years whilst the pupils are getting a thorough grounding in literacy in their mother tongue, and only thereafter should a change be made from mother tongue instruction to the English medium.

In particular attention was paid to confirming or disconfirming the hypotheses that were raised in the second chapter under which are subsumed a number of the following six pertinent issues.

(i) Ease and level of achievement in English learning by the end of primary school.

(ii) Level of general educational attainment.
(iv) Bilingualism.
(v) Change-over issues.
(vi) Self-esteem related to mother tongue.

The starting point of the discussion is marked by a look at the first hypothesis that in a large proportion of grade one, two and three classes in government underprivileged schools, frequent use of vernacular languages to supplement the mandated use of English will be observed.

An investigation of the government's mandated ZPC in the schools however reveals that on the whole there is very little English being used by the teachers in instruction nor is there any significant amount of English being spoken by the pupils, whether these come from privileged or underprivileged schools. This latter fact is supported by Mundia (1982) who also observed that the popular media used by pupils when conversing to each other is the vernacular. Figures 1b, 2b, 3b, 4b and 5b on Ps. 55-59 however reveal first that there is a general upward trend in English with higher grades, although this does not seem to be the case with grades 1, 4 and 7. The graphs also show that Maths lessons yielded generally less English than English lessons (i.e. in privileged schools 89% of the total observed frequencies in teacher to pupil talking and 78% of the total observed frequencies respectively; in underprivileged schools 58% of the total observed frequencies in teacher to pupil and 9% respectively). The difference between privileged and underprivileged schools was significant ($X^2 = 24.937$, df 1 $P<.001$). In privileged schools in English lessons, the teachers here spoke more English than those in underprivileged schools. The same was true for Maths
As for pupil to teacher talking, again there is higher proportion of English usage in privileged schools (73% of the total observed frequencies) than in underprivileged schools (54%). The chi-square shows us that this difference was significant at the .001 level ($X^2 = 12.135$, df 1). The first hypothesis is therefore confirmed.

What is interesting from the mentioned graphs is that the change in the amount of either English or Bemba used as media as pupils move from grade one to six does not appear to be significant enough. The reasons for this are not difficult to find. In the interviews with the longest serving teachers, it was reported that teaching in English to a child to whom English was foreign was not only almost impossible (a fact also acknowledged by educational authorities) but made the resort to the vernacular medium inevitable. Since no pupil is capable of fully expressing him/herself in English because they lack the proficiency in it, classroom practice is usually that teachers do most of the talking and pupils only respond to teachers' questions, a fact supported by Serpell (1980) Hoppers (1981) Flanders (1969) and Mundia (1982). Even the available teacher initiated English, is to a large extent dictated by the nature of the subject. For instance when the teacher asks:

T: What is the area of a rectangle?
P: Length multiply by width.
T: What is the area of a triangle.
P: Area multiply by breadth over two.

pupils respond in mathematical terms.
But when the teacher in this same lesson asks a question that does not require mathematical terminology most pupils responded in Vernacular. Basically, the problem as reported by the interviewed teachers, is that pupils are not offered enough opportunities in which to practice or put to use what they have learnt, a fact also acknowledged by Irvine (1969). As Chishimba (1980) observes, the child in Zambia has difficulty in learning in English well or in learning through the medium of English in the primary school. By the end of grade seven only a negligible number of pupils are capable of carrying out a short free style conversation in English. Only a few are able to write a message connected enough to make a sizeable paragraph. This view is supported by our findings which at the same time also support Serpells' (1980). A microanalysis of the sentences in the English writing tests revealed something like Serpells' "ritualized performance", where students from both types of schools produced long and similar sentences, that reflected the fact that the students had learnt these sentences by heart without necessarily understanding what the sentences really entailed. This observation is amplified further by our discovery that some students wrote 'stories' that never reflected events depicted in the pictures. These students were able to reproduce these sentence and yet could not even utter sentences long enough except the 'rituals' like, 'may I go to the toilet'; 'good morning sir'; 'Thank you very much'; 'I am very well thank you' a.s.o. ('Stories' is qualified because most of the pupils never had anything written in connected prose, but what looked like a series of sentences representing each of the six sequence the picture).
The picture in the realm of reading is not different either. At the lower grades especially, (1 to 3) pupils were mostly able to read words when these were accompanied by pictures. When these same pupils were asked to read the same items individually without the denoted objects, there was partial success. What came out clearly was the fact that a lot of these pupils had memorized these words, and this was due to the mechanistic approach that most teachers adopt in teaching reading. That is, the teacher reads words four or five times and each time asks the pupils to read after him in unison. It was interesting to note for instance that pupils were able to read these words by not necessarily looking at the black board! When the teacher wrongly read PLANT as PAST, all the pupils responded by saying what the teacher had said. Chikalanga (1983) observed that pupils mechanically repeat sentences after the teacher, and are not able to construct sentences of their own.

The most frightening finding was that pupils on the whole were not able to read by grade three. The same material as that used by Sharma was used. Not even grade four pupils could, hence all these grades were exempted from both the writing and reading tests.

It is quite clear from the foregoing findings that pupils simply reproduced what appeared like models they had been given by teachers. Serpell (1978) was not making an overstatement when he observed that language teaching at the moment unfortunately promotes the "sterile recitation of idealized forms divorced from understanding" (P.23). It is very difficult to infer from these findings that pupils were expressing what they already knew, wanted
Sharma's (1973) finding that grade 3 reading skills were very low has received support from our study. As noted earlier, not even grade four pupils were able to do the reading test, let alone the writing test. This seems to be a clear demonstration of the phenomenon Serpell (1980) calls 'pseudo-retardation'. The fact that these pupils failed to read does not suggest that they did not have the competence nor did it suggest that they were retarded, but rather suggests that the failure is a coping strategy via which pupils cope with the problem of mastering the school curriculum through the medium they were unfamiliar with: English.

Another interesting finding emerged from pupils' 'Post-mortem' on their reading and writing tests. On asking pupils questions concerning which language (English or Bemba) they found easier on the two skills of reading and writing, we discovered a phenomenon Serpell (1980) would call 'narrow, non-generalized literacy'. Regardless of the type of school from which these subjects came the majority of them reported that they found reading English a lot easier than their mother tongue despite the fact that this was their first language which they spoke very fluently. (See table 11 and 13). This claim is backed up by the observation for instance that two subjects from privileged and three from underprivileged schools almost failed to read Bemba but managed to read English. Implicit in most of the reasons given by most of them was the fact that they learnt how to read English and not their mother tongue. Although (See table 13) there is a slight difference in the actual performance on Bemba and English reading tests between the two types of schools (i.e., underprivileged, general; Table 13),
that some people are learning to read as an activity which is too closely tied to one particular language receives support from the findings in this study.

The finding that students in both types of schools found writing Bemba easier than English, on face value seems to be supported by the fact that on the average performance was better in the Bemba test than in the English one (See table 13). But inferring from the reasons given by a majority of the subjects, it is plausible that pupils erroneously took knowing to speak their language to be synonymous with writing it. As we extrapolate from Serpells' hypothesis, there does not seem to be a linkage between one's mother tongue reading proficiency and writing proficiency in that tongue. In fact a close inspection of the data in table 13 suggests quite clearly that we might be dealing with a 'floor effect' here. The level of competence in writing is rather low thereby making it difficult for us to detect the difference between the languages. A more advanced level of reading competence would have allowed the scores to spread out more and reveal the difference. As the results in the other skills besides English and Vernacular writing skills generally show there seems to be a low level of competence by the subjects in the skills whether these come from privileged or underprivileged schools, and this study has, as we have seen and partially will see later, attributed this to a lack of a policy consistent with classroom reality and the fact that the teaching of English, let alone the teaching of vernacular languages with all that this requires, leave much to be desired. We have noted - and this has been admitted by educational authorities - in addition that there are no properly
teaching. That pupils learn English with ease and that their level of proficiency in the same is high at the moment in Zambia Primary Schools is a fallacy!

Perhaps it is important at this juncture to examine some of McAdams' (1973) findings, as these contradict some of the findings in the present study. In interviews with teachers, contrary to the findings of this study, McAdam reports that most of these teachers indicated favourable attitudes to the use of English as a medium of instruction in Maths, Physical Education and Creative activities. These teachers reported using English throughout in all these. The teachers also reported that most of their pupils used English most of the time in class and a substantial amount of it outside the classroom when conversing with their peers. In addition to the factors/questions raised about McAdam's thesis already alluded to in the introduction of this study, a number of questions still remain unanswered. In the first instance, the educationists themselves admit it is impossible to teach a child in English, his foreign and unfamiliar language. Hoppers, (1981) Chikalanga (1983), Chishimba (1980) and the present study, among others have confirmed this. To quote a curriculum specialist at the Curriculum Development Centre, English Department, "McAdam got what he wanted". Why, for instance did McAdam not administer the same questionnaires to teachers in non-medium schools? One can intelligently speculate that had these also been interviewed the same responses as those he obtained from teachers in the so-called medium schools would have been obtained. Teachers were well aware of what government policy was. It would have been risky – at least the teachers interviewed tell us.
the time in teaching. The other reason for teachers' responses could have been due to the fact that the 'Hawthorne effect' was operating at the time of McAdam's study. From the foregoing it seemed logical for the teachers to say that pupils were able to read and speak English with little trouble. It would have looked an admission of failure for the teachers to say they use English most of the time and yet this is not reflected in their pupils' proficiency in the language. Just because the ZPC was introduced does not mean that it was being followed. This study, which investigated the actual situation in classes has suggested that there is, in actuality, nothing like the ZPC in the schools. Teachers, as we saw earlier, in fact complained that the scheme is too detailed and heavily controlled, that there is not enough time to entirely follow it. McAdam implicitly seems to admit this except that what he thinks is 'tight organization' and 'close knitting' is not construed so by the teachers and the educational officials. On p. 520, he says, "The ZPC is so tightly organized and closely knit that there is little extra time available for the teacher to help those who are not making satisfactory progress". Chikalanga (1983) for instance reports that 77% of the teachers he interviewed found the ZPC heavily controlled. McAdam tells us this about teachers responses that everything as regards reading, speaking and writing in the schools was o.k., "However, the impressions of these teachers are, of course subjective and the true state of affairs will only be determined by empirical investigation" (p. 528). One would have thought that even the issue of whether teachers teach in English or not as per Government policy, or whether or not pupils are able to speak and read English with ease, could also only be determined by empirical investigation.
Since there was no empirical evidence for his findings, as regards the issues above, especially data obtained from teachers, we are forced to agree with the English specialist at the CDC. To illustrate the validity of the foregoing contention, it is interesting to look at how strongly he comes out on something that contradicts his expectation. When teachers report that they use English most of the time, most of their pupils are able to read and speak English and that English-medium pupils are more lively in their lessons, he is contented with this. But when these teachers in the so-called English medium schools report that 15% of the children could not read at all, and over 20% could not read a reader in the grade below, he cautions, "it has been suggested that too much reliance can not be placed on these necessarily subjective replies from teachers." (P.528). A close examination of the information contained in the graphs drawn in fact confirms this observation. The distribution of scores in the English reading test emerged to be bimodal—with a certain percentage of pupils, (close to 15% frequency) from English medium schools failing to read as stated earlier on (See figures 8 to 11). And yet when this same kind of information is obtained from the teachers McAdam is not happy! Goodwin (1977), talking about pupils' reading difficulties, informs us that there is little fun or enjoyment implicit in the reading lessons in the upper grades. It is difficult therefore to see how the lessons could be more lively in class as McAdam maintains.

Elsewhere, McAdam tries and offers implausible explanations for his unexpected findings. When pupils in his study were grouped according to catchment areas to ascertain whether the broad and socio-economic classification into Urban and Rural groups would reveal
Fig. 8 Percentage frequency polygons: Comparison of scores of the English Medium and Non-English Medium groups on the English medium Language Test.

Fig. 9 Percentage frequency polygons: Comparison of scores of the English Medium and Non-English Medium groups on the Non-English Medium Language Test.
Fig. 10. Percentage frequency polygons: Comparison of scores of English Medium and Non-English Medium groups on English Medium Reading Test.

Fig. 11

Percentage frequency polygons: Comparison of scores of English Medium and Non-English Medium groups on the Non-English Medium Reading Test.
than urban ones. He explained the results in terms of factors that he maintained appeared to outweigh the advantages that urban pupils might have in their greater opportunity of exposure to English; "It has been suggested that this superiority of rural over urban pupils may be due to the greater motivation of rural pupils... there is also the relative lack of distractions in the rural areas and the realisation that the passport to an occupation which is better paid than any rural occupation is success in school work" (P.523). Chishimba (1980) however, maintains that the rural and urban pupils face the same constraints in their learning. Goodwin (1977) sums it all up when he remarks: "The ZPC has not involved systematic, continuous and longitudinal evaluation during its inception and development. The answers to countless questions on benefits, advantages and disadvantages a.s.o., inevitably rely more and more upon feelings and impressions, emotional bias and sweeping generalisations, than upon objectively obtained quantitative measures" (P.35). Besides, the trend has always been that you have on the average more pupils going to form 1 in urban schools than rural ones such that often, especially at form III level of education, you have pupils from urban areas transferred to rural schools to fill gaps there. This is also reflected in the fact that the so called cut-off point in most rural schools is lower than that in the urban areas. His educated guess is therefore incompatible with the actual results! Goodwin (1977) supported by Henderson and Sharma (1974) who assert that...
In sum, whether or not there is more English medium instruction in privileged schools than in underprivileged ones, the fundamental finding in this part of the study is that the use of the English medium in Zambian primary schools from grade one is a statement of intent rather than classroom reality. It remains doubtful therefore that failure by pupils to express themselves in the functional language and their illiteracy after grade VII — as observed Mundia (1982), could be partly due to the fact that instruction is in English from grade one, as was reported by the Evaluation Committee of the Curriculum Council on the impact of English medium on children's learning.

What would therefore be the underlying factors of the existing status quo in the school pupils' poor proficiency in language? Could this be due to the fact that government policy is not being followed as stipulated? The problem becomes complex when we are told by the teachers that to use the English medium from grade one is almost impossible. Just to amplify the observation that on the whole there are no differences between the two types of schools, as far as the performance of the pupils in these schools is concerned we should look more specifically at the language skills in question.

As table 15, P. 84 shows, there is no straight forward pattern revealed in the differences in performance in the aforementioned skills:Privileged schools' subjects only did better than their counterparts in English comprehension. Underprivileged pupils on the other hand did better in English reading and vernacular comprehension and writing. It would be interesting to speculate
did better than their counterparts in English reading and writing. Could the fact that there are more incidents of vernacular medium instruction account for this? The results in the English and vernacular writing tests do offer enough evidence to support the speculation. What seems clear from the tables, 13 and 15, is however that there is no evidence to enable one make a definite and straight-forward conclusion that one group of subjects is better than the other in one of the media than in the other. A plausible explanation is the fact that teachers in these schools flout government rules (i.e. use Zambian languages) and thereby make teaching English reading and writing easier and effective than this would have been in a pupil's second or foreign language. Or again here we are dealing with a floor effect. The level of competence, as we noted earlier, is rather too low and this makes it difficult for the differences between the languages to be detected.

What could then account for the lack of a clear cut distinction between the two types of schools in terms of whether one will be better in the skills concerned in one of the media (i.e. English or vernacular) as shown in table 13? We have already noted that the differences between the two types of schools in terms of the incidence of either English or vernacular instruction is significant, as is reflected in the graphs already referred to and the Chi-squares performed. A leaf from Chishimba's (1980) analysis of such types of schools will suffice.

We are informed by Chishimba that sixty per cent of our primary school pupils live in the rural areas where to them English is only considered a language of the classroom. Outside the classroom
who only look at their children's English as a sign of future affluence. The type of pupils we are talking about here can be likened to our underprivileged subjects in the present study. In fact the latter are even 'more underprivileged' in the sense that they, unlike this study's underprivileged who live in periurban areas, live in the rural areas. Conversely, we can talk of pupils in the urban areas who seem to be more privileged as they are more exposed to English than the former. Chishimba (1980) informs us that this difference between the two types of schools (urban or rural) should not be interpreted to mean that urban children know or use more English than the rural ones. Rather, this is meant to provide a basis for a separate point of emphasis which is that urban pupils are more highly motivated to learn English than their rural counterparts. In other words the former category of pupils have a greater need to use English and sometimes speak it and learn more of it as a result. Chishimba again cautions us however that this should not be taken to imply that urban (privileged) children have a higher enough level of proficiency in English to be able to converse functionally. This only refers to the implications of the relative degree of constraints facing the two types of schools. Otherwise the children in these schools share similar and or identical constraints in the use of English.

It can be concluded from this aspect of the study that the original arguments for the introduction of the English medium component of the ZPC have no empirical foundation. What could therefore be the possible cause of the failure of the ZPC? It has already been noted that one of the
schools today vis a vis the medium of instruction. Nor would it be true to say that there is complete vernacular instruction during the first three of four years of elementary schooling. The other often advanced reason is that the ZPC is too controlled to give pupils opportunities to use what they have learnt. The English department of the Curriculum Development Centre (1980) reports for instance that the ZPC is not effective in teaching writing because there is too much oral work and controlled writing. Goodwin (1977) for instance notes that in the ZPC reading component there "appears to be an overemphasis on silent reading and insufficient development of written expression". (p. 33) The same has been said about writing. Chishimba (1980), Chikalanga (1983), supported by the interviewed teachers, tell us that there are few writing exercises contained in the curriculum materials of the ZPC, and this adversely affects pupils writing skills. It is no wonder therefore that written English is not tested at all at the end of grade seven.

4.2 Level of General Educational Attainment in other Areas of the Curriculum.

Moving away from the question of the ease and level of achievement attained by pupils in English learning let us now look at the issue of the level of general education attainment. The present study never directly addressed itself to this question. Government rationale on this issue is that the English that children would have learnt in the alternative system before a change-over is made to the English medium would not have been enough to cope with subjects in other areas of the Curriculum. From a body of outside research we learn that whilst it is a fact
through the medium of a second language than their mother tongue, research comparing bilinguals and monolinguals, at least exists to show that academic achievement is lower among children who have learned through a language which is not their mother tongue (McNamara, 1959). Relatively recent evidence has come from Collinsons' (1974) study, where two groups of children both of whom spoke different languages were compared on Science material. Collinson reported that children, "made far more deductive leaps and recognized more analogies when taught science in the vernacular than in English, even though they had been studying English for six years" (p.455). We have also noted elsewhere that most of what is available at the moment points to the conclusion that education in the mother tongue unlike in a second language has no detrimental effect on the level of pupils' educational attainment in other areas of the curriculum. Infact the Ministry of Education acknowledges the fact that educationists generally accept that learning is best done in the mother tongue, except they fear Zambia has too many tribes, "the child must be introduced to formal education through the medium of a familiar language in which he can communicate easily. Although it is generally accepted by educationists that learning is best done in the mother tongue, this situation has been found to be impracticable in the case of every child in multilingual societies such as Zambia" (Ministry of Education, 1977, p.32).

From here it seems quite clearly that what the policy serves is on the whole a political purpose, as has already been noted by Kashoki (1974) and Serpell (1976), and Hoppers (1981) who concluded from his Mwinilunga study that, "even when sufficient
data are available and past experience has been evaluated, it is still possible for decision makers, often out of political expediency, to persevere with "traditional" assumption and remedies" (p. 7). How for instance would it be possible to talk about the English competence of the pupils being adequate to cope with other subjects at a time of a change-over when in fact even at the end of primary school the proficiency is still too low?

In the face of the findings from the present study and the support received from previous studies on the question of medium of instruction, what are the alternative systems? Basically, there are two questions: should English be used as a medium of instruction immediately a child enters school or should it be introduced after three or four years of primary schooling after it has been learnt as a subject in the curriculum?

4.3 Medium of Instruction: Alternatives

In examining the options for Zambia an attempt is made here to examine the feasibility of alternatives proposed by Houis (1976) after he examined the situation as it prevails in most third world countries. Houis starts by giving us the 3 pedagogical functions of language that underlie our acceptance of the principle of bilingual education:

(i) the language must give access to writing as a means of communication
(ii) the language must be capable of being used as a general medium of instruction and
(iii) the two languages involved in bilingual education must also be subjects on the curriculum.

He presents us with solutions each of which is based on a different medium, illustrating the importance of context.
presents the functions allocated to the two languages in relation to the chronological languages factor, expressed in the following abbreviations: Lg 1: A first language, African; Lg 2: B: Second language, English. It has been documented by Serpell (1977) that when the Zambian child starts school he may possibly be familiar with two or more African languages. The complex matter that this gives rise to is the choice of the languages in the school.

**SOLUTION 1:**

Using the African language to give the child access to reading and writing and to use it as the medium of all instruction. The language is of course included in the curriculum as a subject and so is the second language. This choice presupposes that appropriate educational materials and teacher training courses exist, and also that the necessary work has been done to standardize the presentation of the words and utterances. A closer look at the problems and shortcomings of using and learning the mother tongue in Zambia Primary Schools suggests that this solution would not be feasible at the moment. In the first instance mother tongue teaching as reported in Moodys' (1981) study is suffering from the lack of grading even in basic readers and textbooks in other subjects of the curriculum, especially for the first four elementary grades. This is due perhaps to two main reasons: absence of educational research in the field of mother tongue instruction and the lack of educators specialized in language arts, and of specialists in the techniques of children's book construction and production. Authors of most textbooks that children read are only subject matter people. The result
Chimuka (1976) for instance, talking about a number of trained teachers for carrying out the administration of language programmes, informs us that presently most of the people assigned to the development of Zambian languages in schools have had no training in the principles and methods of teaching this subject. Chimuka continues by observing that of the 3,038 teachers in secondary schools, only 725 were Zambians and of these "none... had specialized in the teaching of Zambian languages, and being non-specialists, they handled Zambian languages, if they were asked to do so, with very little confidence" (p5), a fact supported in Moody’s reported study where he interviewed secondary school teachers. In addition, there was a lack of basic materials. Some of the available books were not sufficiently graded and their orthography not standardized. In fact the author of this report is not aware of any educational research in the field of teaching any of the Zambian languages as a mother tongue to have been done anywhere in Zambia. In the Zambian language Workshop: Preliminary Evaluation Report (1982) we are told that class instruction in an approved ZL is done without first elucidating the basic facts relating to the extent of the general use and to the syntactic and semantic homogeneity of the language at different levels at which it is used by the children. The result this gives rise to is that in many cases children have encountered great difficulty with the approved ZL at school, be it their mother tongue or second language. In the same Evaluation Report, we are told that, "the Upper Primary Course is based on the assumption that literacy has been acquired at the end of the Lower Primary Course by every pupil. This however is not always the case. Some pupils can not read or write their own
language at the upper level. One finds that throughout both lower and upper primary courses, the teaching of the seven approved Zambian Languages has been obligatory according to the policy, but this has not been the case because ZL courses have always been neglected" (p. 5), a fact supported by findings in the present study. For instance, Bemba in both privileged and underprivileged schools is only allocated on the average four periods per week as contrasted with nine for English. In fact the type of teaching is not like that for English. Usually, pupils just read story books, or a whole period is spent on story telling by the pupils or the teacher.

**SOLUTION 2:**

The African language is chosen to perform the function of teaching the child to read and write and as a curriculum subject. English is introduced later as a subject and is used as a medium of instruction for the whole of the curriculum. This presupposes a situation where African language educational materials are not yet available for the whole of the primary school courses, but only a syllabus and some reading matter. This may be a preparatory stage for solution one above. Looking at the situation in Zambia (i.e. inappropriate and inadequate teaching materials; lack of competent teachers, absence of language experts a.s.o.) this option would be ideal for Zambia. Serpell (1977) and Mytton (1974) and others have demonstrated that most Zambians are capable of understanding and speaking at least three languages. This would be ideal for the solution in the sense that the question of which language to use for the first 3/4 years of primary school would not arise. Le Page (1964) informs us that the problem of an official vernacular as well as
best be solved by the adoption of a lingua-franca already spoken at a low level of efficiency by members of all language groups. This can unify the groups without raising any hostilities. People generally acknowledge these days that there are very few people in Zambia who do not understand Bemba, and a substantial number are even able to speak it. If attempts were made in this direction the only problem encountered would be that languages like Bemba and Nyanja tend to suffer from lack of prestige and this may be difficult to overcome. They also suffer as a result from the absence of literary resources which will not develop until the languages gain some prestige. As will be seen below however, a combination of the various solutions would take care of some of the possible disadvantages of particular solutions, except that these combinations should be deeply rooted in an analysis of the economic and socio-linguistic circumstances of the nation. The Soviet Union for instance, has what are called parallel medium schools where two languages are used as teaching languages in order to promote second language learning without depressing the status, or loosening the hold of the vernacular language. This will at the same time solve the problem of the much talked about, but unknown, change-over effects and the question of the level at which the change in the medium of instruction should take place (Lewis, 1972).

SOLUTION 3:

This is a solution that would be possible if African teaching materials existed, but only for certain subjects. English would be used as a medium of instruction for other subjects. This system, we are informed by Lewis, has successfully worked in the
Soviet Union's dual-medium schools. These schools have led to a phenomenon called National-Russian bilingualism, where peoples' languages lives are characterized by a dual process; the different nations (equivalent to provinces in Zambia) use their local languages in school for certain subjects and Russian - a second language to most people in the USSR, for other subjects. The successful implementation of this in Zambia would require careful economic considerations.

**SOLUTION 4:**

Solutions one, two and three use the African language to teach reading and writing. This provides the minimum condition for establishing a sound bilingual educational policy. In solution four, the African language is included in the curriculum as a subject but performs neither of the two functions. For this reason, the only teaching materials it requires are a syllabury and some reading matter. This solution, like the next two, presents no economic problems from the educational point of view, except it would be disadvantageous to the child. As we have seen in the present study teachers often resort to instruction in the vernacular because it is impossible to teach the child through English, a language he has confronted for the first time. Besides, it is very doubtful whether effective language learning would take place because of the differences between home and school vis-a-vis language use, Serpell (1977), for instance, conducted a study dealing with a sample of grade I school children in Lusaka. These were given questions alternated among Nyanja, Bemba and English falling within the following domains: home, play and picture. Responses were scored in terms of appropriateness of content, where it is scored
in English were significantly lower than scores in Nyanja in all three domains. Scores in Bemba were not significantly different from Nyanja scores on the Information test and not significantly different from English scores on the Play and picture tests. For the Bemba home-language sample scores in English were significantly lower than the scores in Bemba in all domains while scores in Nyanja were not significantly different from scores in Bemba on the Information and Play tests and not significantly different from scores in English on the Picture test. These results therefore provided strong confirmation of the hypothesis that the children would handle questions about home better in Nyanja and Bemba than in English. With regard to the pupils' specialization of competence in English, results for the Bemba home-language sample reliably confirmed the other hypothesis that these children's command of English would be better in dealing with pictures than in answering questions about home. Results also showed that children from Bemba-speaking homes had a better command of Nyanja than of English (see figure II, on page 121, reproduced from Serpell's study). It has also been voiced that the other danger of the solution is that the writing habits acquired through spelling conventions of English may prove to be a handicap for the child when he is learning to spell African words, for the conventions of written English may be projected on to those of the African language (Houis, 1976).

**SOLUTION 5i:**

In this solution writing is learned through the spelling conventions of English and English appears as a subject. On the other hand, the African language is introduced as a curriculum
Fig. 11: Communicative competence of two home-language in three conceptual domains in each of three codes

Linguistic code of test:

- x Nyanja
- x Bemba
- o English

Note: Each point represents the average of four observations on four different children.

Statistically reliable differences (not joined by underlining)

Information test: Nya, Bem, Eng.
Play Test: Nya, Eng, Bem.
Picture test: Nya, Bem, Eng.

Nyanja Code: Inf, Pla, Pic.
Bemba Code: Inf, Pla, Pic.
English Code: Inf, Pic, Pla.
is a reversal of solution 3. Figures 12 and 13 show the six possible solutions, and the two extremes to these. All the solutions are based on either an acceptance of bilingualism (figure 12) or Monolingualism (figure 13).

As we noted earlier, solution number two seems to be the most feasible for Zambia in the present circumstances. A gradual introduction of other solutions or some elements of these solutions is possible except that the country's economic and socio-linguistic aspects must be considered. The choice of solutions depends on the findings of systematic economic and socio-linguistic research. The findings of the study and the only available sociolinguistic data cited seem to favour solutions 2 and 4 for Zambia's educational system in the present circumstances except in teaching in the vernacular for the elementary years, teachers should be trained adequately and materials be adequately prepared in the vernacular by experts in the language arts. Translation strategies would be very ideal in promoting communicative competence in English in this respect. What the experts' knowledge would do is enable the teacher make cross-language comparison and translation a very productive and helpful exercise for the pupils (Serpell, 1980). As Massad and Lewis (1975) note, this is one aspect of communication efficacy the experts can not run away from; "While the student of a second language may find it necessary to use various translation strategies, it is very rarely the case that a foreign language is learned without some associative transfer or translation taking place no matter how much the teacher may seek to avoid the use of such processes" (p.26), a method that proved effective in what was observed. In fact the CDC English Department reports that 91.3% of the teacher
it interviewed use translation strategies in their teaching (Ministry of Education, 1980).

There are a number of advantages that can accrue from this system. The system would not belittle the generally accepted assumption that the earlier the exposure a child has to a language the more are his chances that he will master that language. Exposure at grade 4 or so might be early enough for the assumption to materialise, and besides, this will be more productive since the child has already mastered the basic skills of writing and reading.

The only overlooked disadvantage of this system would be, as the Nigerian experience shows, that the introduction of English at a later stage as the predominant medium would mark an effective break away from the vernacular. The effectiveness of mother tongue teaching is thus severely curtailed by insistence on extrinsic factors: being essentially restricted to the primary years, it can only pay its attention to the said objective of enabling pupils obtain a thorough grounding in the mechanics of reading and writing in a purely instrumental sense; anticipation of the high prestige that the English language is accorded underscores the vernacular medium phase as a period of transition in schools (Opitz, 1972). And children can not be blamed for obvious reasons: Mr. Mbewe - Chairman of the electoral Commission, warned aspiring candidates (Parliamentary) thus: "Candidates who will be elected to Parliament without being conversant in English risk having their election invalidated by the High Court ... such candidates could lose their seats if their rivals petitioned their being elected on grounds that the winner did not meet one of the
### Figure 12: The Six Possible Solutions (Bilingual Model)

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<td><strong>lg.1A  lg.2E</strong></td>
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</table>

**Language giving access to writing as a means of communication**

- **Solution 1**
- **Solution 2**
- **Solution 3**
- **Solution 4**
- **Solution 5**
- **Solution 6**

**Language as a subject**

- **Solution 1**
- **Solution 2**
- **Solution 3**
- **Solution 4**
- **Solution 5**
- **Solution 6**

**Language as the medium of instruction**

- **Solution 1**
- **Solution 2**
- **Solution 3**
- **Solution 4**
- **Solution 5**
- **Solution 6**

Row 3 could be subdivided further depending on whether the language should be used as a medium for lower grades or throughout all the grades or only for upper grades.

**NB:**
- **lg.1A = First Language, African.**
- **lg.2E = Second Language, English.**
September, 1983, p. 1). The transitory role that the vernacular plays as a medium of instruction leads to complaints from Secondary School teachers that there is inadequate language learning in Primary Grades.

**FIGURE 13: THE MONOLINGUAL MODEL**

<table>
<thead>
<tr>
<th></th>
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<th>SOLUTION 8</th>
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<tbody>
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<tr>
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<td>communication</td>
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<tr>
<td>Language as a</td>
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<td>subject</td>
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<tr>
<td>Language as the</td>
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<td>medium of</td>
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<td>instruction</td>
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The foregoing makes the position of a linguist important because decisions about a national language policy are normally made by politicians and not by linguists; and for political reasons which may seem valid at one moment but may have lost much of the force ten years later.
4.4 The English Medium and Culture: Hypothesis 2

We were informed in the introduction by Lewis and Massad (1975) that learning in English, and learning English in particular carries with it a cultural load. Learners are not completely free from being influenced by the cultures and traditions that go with it. Consequently authorities like Kapwepwe (1970) have argued this would destroy the African Culture.

Since the idea of culture is so protean, eluding exact definition most attempts to measure it are fated to be regarded as singularly dubious enterprises. In investigating culture, what one would take to be experimental turns out be simply a process of trial and error. This would not deter us however since it applies to many other research projects in the field of education today. Is there any hope that culture can be measured quantitatively?

A lot of people would say not at all since they reckon Culture can only be appraised, never quantified, a notion that seems to be embedded in the many different definitions of culture. On the other hand, without agreeing whole-heartedly with the foregoing proposition, the Crowther Report is apt insisting that "Numeracy has come to be an indispensable tool to the understanding of all phenomena, and not only in the relatively closed field of the natural sciences" (in Richardson, 1963, p.1). The belief therefore that culture can not be subjected to empirical treatment is no longer quite so defensible as it was long ago.
We are informed by Richmond that the word culture gives rise to double thinking. Broadly, he contends that culture comprises the interests, and activities and the way of life of a whole society. In the narrower sense it means something much more specific. It is this second, the thin, top crust which supplied the field of investigation in the present study.

Some people might argue that by administering the kind of tests used in the present study to the students, more than anything the tester simply ascertains the extent of these students' familiarity with an haphazard assortment of cultural elements. The most that can be said without fear of contradiction is that it is desirable to have some acquaintance with greater masterpieces of art and literature. In fact, as far back as the 16th Century, Culture was glossed as, "improvement or reinforcement by education and training" (Stenhouse, 1967, p.2). In such areas as literature are found the feeling that 'one ought to know' strongest. From this perspective one would argue therefore that one aspect of culture is constituted by what pupils learn in the schools. If we look at culture in these terms it would not be proper for us to talk about distinct Zambian culture because what pupils learn in schools encompasses a lot of things, some of which are "foreign". In this respect if a pupil learns more about U.S.A. and becomes more American it would be more proper to say he is alienated from his ancestral culture than to say he has no culture. By knowing the meanings of proverbs from his or her ancestral culture a child learns how to grow as it were, learns some morals and decency.
Proverbs, I feel, are part of the culture of a people everywhere. A pupil's comprehension of the proverbs in his society would therefore be a reflection of his 'acquaintance' with literature. The ten proverbs, in the Proverbs Comprehension test - it was hoped served as miniature of contemporary Zambian culture. The fact that 'Zambian' proverbs are common to all tribes of Zambia perhaps serves one important fact and that is that there seems to be nothing like a distinct Zambia Culture in Zambia. It was hypothesised that pupils' comprehension of Zambian proverbs would be better in underprivileged schools than in privileged ones.

Results from table 5 on P.57 and table 13 on P.82 showed subjects from underprivileged schools to be better than those from privileged. Whether this is due to the differences in the two types of schools or not as far as our criteria for distinction is concerned is not certain.

It seems the difference can only be explained in terms of the number of periods allocated to Bemba lessons in each of the schools. From table 17 on P.85 we learn that there are more Bemba lessons in underprivileged schools than in privileged schools. Though most of these lessons involve reading story books, the little amount of proverbs interpretation that goes on in the class (especially in underprivileged schools) no doubt accounts for the difference. In fact most of these proverbs are found in these same story books.

Without stretching the implication of this too far, perhaps it would be safer, rather than dichotomize 'cultured'
of culture but in equal quantities. For instance, from the present study it can not be ascertained to what extent the cultural issue is related to the medium of instruction as Manuwa (1978), Lewis and Massad (1975) and Serpell (1975) seem to suggest. In other words, whether instruction in a foreign language at the expense of a pupil's mother language is detrimental to that child's culture or not is not clear from this study for reasons already stated. What seems clear however is the fact that teaching the indigenous language seems to enhance a pupil's learning of the cultural elements embedded in that vernacular. Until further facts are available, it would seem proper to tentatively conclude that Serpell (1975) and the Ministry Officials are perhaps in tune with the times to contend that the question of language and culture revival would be solved by the teaching of indigenous languages in schools. But their contention that teaching indigenous languages would raise their status and consequently lead to a cultural revival seems a far fetched contention under the present circumstances. As long as the vernacular languages' usefulness does not extend beyond local boundaries, and due to the prominence English is given especially in the economic sphere, their status would not be raised by teaching them. What the effective teaching of these languages would do is perhaps enhance the pupils' culture elements embedded in these languages, as the study has revealed. But again, this would still take sometime. In the present circumstances, as we noted earlier, the status of vernacular teaching in the schools is, to say the least, far from being better and this is due to the problems I have already alluded to that must be
Even attempts to solve the language status and cultural issue problems by reverting to restoration of indigenous languages as official languages seem almost impossible. In a paper presented at the Conference on Comparative Studies of Language Planning in Honolulu, McNamara (1969) tells us that it is impossible to stem much less reverse the tide of history in matters of language development, use and learning. He makes the following observation about Ireland: "what strikes one as one surveys the educational scene is the reduction in restoration effort as one passes from Primary to Secondary level and again from Secondary to Higher education. The effect is that the main burden for the restoration of Irish has been placed on the shoulders of that section of the school population which is weakest and least likely to resist" (p.220).

As to the finding that males were better than females, speculation may perhaps suffice. It is general knowledge that the upbringing of Zambian females and that of males are different. Among other things, most oral traditions, folklores a.s.o. are passed on to the males rather than the females, a fact that could have influenced females attitudes towards learning proverbs. Parental influence in this can not be completely ruled out. In the home a lot of the cultural activities like interpretation of proverbs are male activities and are carried on mainly between a father and his son.

4.5: Performance and the Sex and Grade Level Factors

It is now opportune to digress a little and look back at the performances between males and females in general. On
English and vernacular reading and proverbs interpretations, males from both types of school combined dominated in seven of these as compared to females who only beat the males in only three. Could this be explained by Irvine's (1969) maleness factor? In his study he found a correlation for maleness on all verbal tests and concluded this was an indication of an educational aptitude factor associated with maleness across African cultures. In other words, the factor of male aptitude was to be taken as evidence of an interaction between traditional and modern roles in African Society. Irvine cites Morrisby's (1955) study where girls were tested on beads. The finding was a positive correlation in favour of girls, "clearly, the traditional craft of decorative bead work pursued by the female students offer a new plausible explanation for their success" (in Irvine 1969, p.29). In the same way, he contends, are male advantages in verbal skills. While it is easy to understand the connection between beads and females it is not so between males and verbal ability or aptitude. Why, for instance, should individual variation due to gender be only restricted to verbal materials with regard to males? A lot remains to be done in this area.

The reasons for the insignificant difference between the grade levels are not difficult to find. Most, if not all the readers used are not graded. The same readers that grade sevens read for instance are the same that are used at grade six level or the same readers that the teacher read to grade four pupils. It is from these same readers that the teaching of proverbs is done. Lack of enough different texts is another reason that
In sum, culture, in the narrow sense that it has been defined in this study seems to be an issue that is more related not so much to the language of the school as to the status of indigenous language teaching. From the observations made in the schools, the interviews with teachers a.s.o. it appears clear that vernacular teaching is losing ground and the most salient problems apparently precipitating this failure are: lack of teaching materials; lack of a proper and clear primary school syllabus; insufficiency of time allocated to vernacular teaching; lack of trained vernacular language teachers and specialists in the language arts and consequent poor teaching standards; and the status of 'unimportance' accorded to the vernacular and consequent lack of student motivation.

4.6: Administrative and Organizational Feasibility:

All the points mentioned in the preceding section contribute in their own ways to the stock of other related problems serving as obstacles to the success of vernacular teaching so desperately yearned for. It would be unfair to leave the impression that some of these problems are not being tackled by the authorities. This, clearly is not the case. But I feel that a much more practical programme should be embarked upon. Among the number of things that this programme should focus on, the following require immediate attention: The vernacular language teaching requires full implementation; the teaching of vernacular languages should be enforced in all the schools and this should be contingent upon generally comprehensible written forms of the local
a realistic language policy and the development of the language towards sufficiency and effectiveness, the status should rise) and the need to ensure a supply of appropriate texts for students and teachers. This would create a basis for a successful cultural revolution as was the case with Russia. The same problems were faced: Pedagogical personnel was in short supply. In cases of many non-Russian peoples, schools were created for the first time ever, and these had no teachers of their own. To get around such problems special teacher-training institutes and public education institutes were set up to train teachers: Short term courses were organised in many cities, where, along with other subjects teachers studied their native tongues, orthography, history and national literature. National Departments (equivalent to what in the Zambian context would be called Provincial departments) were created at Universities and educational institutes where teachers were trained. Texts, instructional aids in the national languages as well as terminological dictionaries of various types were evolved. Teaching in national languages in many multilingual populations were only conducted in primary schools, with Russian - a second language to many - used in the secondary school and higher institution.

Looking at USSR's success story in bilingualism in education, what are the administrative and organisational feasibility of such a scheme in the Zambian context? One of the reasons advanced by the authorities for using English as a medium of instruction in Zambia Primary Schools was that this would make easier production and preparation of materials for teaching since all these will have been in one language. We have noted how the use of different local languages and the use of the official language Russian have worked in Soviet educational system. But looking at what was involved here...
political, social, economic and demographic considerations, perhaps
the Zambian authorities are in tune with the times for their stand.
This study, for instance, discovered that there were not enough
appropriate teaching materials even for the English language; not
enough properly trained primary school teachers; no desks in schools
and so on. One can in fact say that the situation in the schools
will get even worse before it gets better. What took place in the
Soviet Union took a lot of resource mobilization. In the
circumstances that Zambia is and will continue to be in for
sometime, this success story is a pipedream.

This should however not be taken to mean that it would
never work. The final solution, as has already been pointed
out, lies in a careful systematic study of the social, linguistic
and economic considerations of the country. Among the factors
mentioned by Le Page (1964) the following seem to be pertinent
to Zambia.

(i) The demography of the language or languages in
question
(ii) The structural nature of the language is described
scientifically by linguists; the process of change
to be seen in the language due to dialectical
diversification or to contact with other languages.
(iii) The organisation and structure of educational system,
its resources in finance, teaching materials, teachers
and training facilities, both local and available
through foreign aid.
(iv) The cost of any change in the existing language
situation, other than the education costs e.g. the
administrative and commercial costs.

4.7: English Medium and Self-Esteem: Hypothesis 3

The hypothesis that self-esteem is tied to social values
including the high prestige of English has been confirmed. The
result that pupils with high self-esteem did better in the
English skills concerned seems very interesting. The kind of self-esteem that was being measured in the study is that related to pupils' mother tongue. In other words, the investigated question in the main was whether low or high self-esteem as related to a person's mother tongue would effect his/her proficiency in that language. The results in table 7 in other words seem to show us that high self-esteem as related to mother tongue relates positively to English proficiency and not to the mother tongue itself. An attempt is here made to explain this finding. We learnt earlier from Lambert and Tucker (1972) that learning a language for instrumental purposes was the best motivation of learning for this reason, as we have seen, and the reasons are so obvious. We have learnt for instance from Opitz (1972), Kapwepe (1970), Hoppers (1980), Serpell (1980) and others that among the effects of the English medium on the vernacular languages, lowering thir status comes out number one. Moody (1981) also tells us about the lower motivation that all teachers have in teaching vernacular as a result. All these points, plus the fact that the vernacular languages have no real commercial value, renders them as 'second class' languages as far as school is concerned. Whether pupils have high esteem tied to their vernacular languages their motivation to learn them is all expended on learning the English language. It is no wonder therefore that skills in English other than in Bemba were directly related to self-esteem. In other words, rather than the higher self-esteem pupils have with regard to their vernacular, it was the status/prestige of the English language that influenced pupils' performance. To confirm Lambert and Tuckers' (1972) contention, it seems that there is greater
attaining higher English skills and thereby enhancing their self-esteem.

From a close examination of the self-esteem items, one would speculate about whether the 'language element' added to Janis and Fields' Self-Esteem Scale really made it a language related self-esteem scale or not. It appears that more than measuring language related self-esteem the scale more than anything could have been measuring self-esteem (see the Appendix for the two different scales).

Higgins' (1976) observation that a deficit in communication skills in people results in negative consequences in those peoples' self-esteem has not been disputed in this study. The only difference is that Higgins was dealing with peoples' first language which was also the language of commerce and industry. The questions of prestige and status were not raised. In the present study on the other hand, these were important as pupils' self-esteem appeared to be tied to social values including the high prestige of English in Zambia. It would seem unlikely that the learning of English would lead to pupils' negative self-esteem through psychologically failing to value their indigenous culture, as Kapwepwe (1970) asserts.

We conclude from these findings that rather than anything else, the status/prestige of a language is important in as far as peoples' self-esteem is concerned, and whether or not vernacular language skills of pupils in the schools would be improved or not will depend on the status/prestige of the vernacular language as this will, to cite Lambert and Tucker (1972), raise their motivation to learn the language. As Le Page (1964)
noted, the vernacular languages suffer from lack of prestige and also suffer as a result from the absence of literary resources which will not develop until the languages gain some prestige.

4.8: The Change-Over Effects Issue:

There has been a lot of controversy about the question concerning the issue of whether learning to read and write in a vernacular would facilitate learning the same skills in a second language. Indeed, this is the contention held by Stern (1963), Sorrell (1973), Taiwo (1976), Moumouni (1968) and many others. In a report submitted by the Evaluation Committee of the Curriculum Council of the Curriculum Development Centre (1975) it was recommended that English be introduced for the first four to five grades before the English medium. One of the envisaged advantages of this was that English would be introduced as early as possible and this would take place after pupils have mastered basic literary skills. It would be logical to speculate from here therefore that poor grounding in the basic skills in the vernacular would be reflected in the poor skills in the English language. By the same token one would argue that should the thesis about thorough grounding in the vernacular facilitating the learning of reading and writing of English hold, one would hypothesise that there would be very few change over problems when English replaces vernacular as the medium of instruction.

In testing these assumptions, the results were analysed by correlating performance between English and vernacular scores in the language 1968.
proverbs. Table 4, shows very negligible correlations in the skills between the languages in question in both types of schools. First of all, as has already been noted, the observed so called privileged and underprivileged schools exist. There was more English in privileged schools than in underprivileged schools. But that this significantly affects the level of English or vernacular proficiency of the pupils in these schools is not true. The whole issue is compounded by the factor already alluded to that there is poor teaching of the vernacular and English languages in the schools, a fact acknowledged by the Under Secretary in the Ministry of General Education and Culture recently (Zambia Daily Mail, 11th August, 1983). Among the reasons he advanced were lack of text books from NEDOZ, overcrowding in the classrooms (50 pupils per class in most schools) and lack of teaching aids.

Had the finding of insignificant correlations been wholly due to the issue of medium of instruction then we would have speculatively concluded that there are possible change-over problems. This would have been so because the finding would have suggested to a certain extent that there are very few similar aspects between the two languages vis-a-vis the tested skills. As Harrison (1973), supported by Chishimba (1980) noted, "acquiring a second or foreign language is to state the obvious, a very different thing from the acquisition of ones' mother tongue", (p.19). As for now the factors referred to above are enough to explain the findings. Let us examine the change-over issue in brief detail. We noted earlier on that government rationale was that by the time the change-over takes place, pupils' English
language proficiency will be too low to cope with other subjects. Stern (1963), Hill (1965) and Mwanakatwe (1976) have maintained that there are psychological problems experienced when a change-over from a vernacular medium to English medium takes place. Serpell (1978), on the other hand, maintains grounding in literacy in the mother tongue of the child will facilitate the same in a second language, although Stern maintains this would militate against the spontaneous acquisition of speech in a second language. The results from the present study, as we have seen already, have not shed enough light on the foregoing issues. Since the performance in the skills tested in both languages was not high enough to permit detection (as we saw in Table 14) between the languages we can not say with certainty whether there was any facilitating by one language of the other or any militating against the acquisition of skills by either of the languages. This is a very surprising and very interesting finding. Since most Zambians learn English for instrumental reasons and the fact that vernacular languages have no instrumental value, we expected them to have been detrimentally affected by the position of English. As we have already noted however, the most notable effect is the poor status of teaching vernacular languages in schools and the subsequent attitude of pupils to vernacular learning compared to English, Mwanakatwe (1976) and Serpell (1980). The Malherbe (1946 in McNamara, 1964), McNamara (1967) and Lambert and Tucker (1972) and Mclaughlin's (1973) studies had the same finding and ended up with the same conclusion: using a second language as a medium of instruction resulted in equally good progress through the curriculum as was
in the mastery of the home language. Although Serpell (1980) cautions us about the cultural applicability of such findings, Africa (1980) sums up the whole issue thus: "In spite of the many studies which have investigated the advantages and disadvantages of using the M.T. (Mother Tongue or Second Language) or L2 as a medium of instruction in schools, there is no consensus as to which practice is best for all settings" (p.90), suggesting that one system or practice can be used with success in more than one setting. Besides, we have seen that the teaching of the two languages, though on the whole both are beset with problems, is different: English teaching is at least better off than vernacular although test results do not reveal this. But what we can not agree with from this study's point of view is Serpells' (1978) assumption that by grade three basic literacy is likely to have been established by children so that the issue as regards the point at which the change-over should take place will pose little problems. The present study found little support for this assumption. Pupils at grade 3 level, let alone grade 4, showed very little evidence that they had acquired basic literacy, a fact that has been supported by Sharma (1973), Hoppers (1981) and recently by Chikalanga (1983).

The failure of the data in this section of the study to provide a definite and clear support for the assumptions made suggests that more systematic and carefully controlled research is required to investigate the change-over problems and the issue of thorough grounding in the vernacular. This, among other things, demands a search for English medium schools and schools where the medium is a pupils' vernacular for the first elementary years of school. This would mean that the student is
teaching of English and vernaculars in the two types of schools are of the same quality. At present in Zambia, it is difficult to make such a distinction because there are other factors that always remain uncontrolled. In the so-called English and vernacular medium schools factors other than the medium of instruction come into play such that it would be impossible to attribute performance in the literacy skills purely in terms of medium of instruction. Factors of social-class, parental education and occupation, home environment, teacher qualification and quality of teaching and the medium of discourse should be considered in future work on these topics. For instance, table 11 on P. 95 shows us that there were differences between the two samples of subjects in terms of their parents' occupations, education and the average amount of English they used in their houses. On the whole privileged samples came from parents whose occupations, schooling and amount of English used was better than those from underprivileged samples. Future research should be aware of such factors and find a way of controlling for them.

The six-year education project of the University of Ife is one research whose findings will greatly answer some of the numerous questions that have not been answered in this study. The project basically examines the efficiency of the mother tongue as the medium of instruction throughout a six year primary education programme. Briefly, the design involves two types of classes viz: an experimental class where the medium for all subjects (with carefully prepared teaching materials) except English—which is taught by specialists—is Yoruba. The control class, where the medium of instruction in all subjects is Yoruba for the first three years.
It is not the intention of this study to speculate about the results of the Ife project but one thing is obvious: the mother tongue as the medium of instruction should make the child more relaxed and better adjusted as Serpell’s (1977) study showed of Lusaka’s Bemba and Nyanja speaking pupils. In fact, much of the evidence available from child Psychologists vis-a-vis the intellectual development of a child leads one to claim that there is every case to assign to the vernaculars the role for which they seem best suited; the role of educational medium in the critical years of schooling. The main problems are of course that of the adequacy of the vernacular teaching materials and the question of transfer, i.e. at what point in time should the vernacular be replaced by English as a medium of instruction. As for the problem of educational materials what is going on at Ife suggests that this is not an insurmountable problem; mimeographed readers and texts have been neatly bound into books. On transfer problems teachers use parallel – medium during the transitional period. This is often dictated by the inadequacy on occasions of English to achieve the objective of the lesson.

The University of Zambia School of Education could carry out a similar project as the Ife one. It is quite clear that data from such a study, will empirically be desirable as whether or not teaching in the mother tongue for the first three or four years during a pupils elementary grades before a switch is made to English is a very effective way of teaching children how to read and write.

I thing a study of this nature would be desirable for many reasons:
(a) it would stimulate production of improved ZL teaching materials.

(b) it would provide an opportunity to explore the question of multilingualism in this context, e.g. would Nyanja speakers learn to read and write better in Bemba than in English?

(c) it would demonstrate the feasibility of studying in ZLs.

(d) it would open up the Ministry's awareness of alternatives.

4.9: Parental Attitudes and Language Proficiency: Hypothesis 5

What we have learnt in hypothesis 5, where we attempted to correlate parents' attitudes towards English with their children's proficiency, is first and foremost that when the parents are pro-English usage very often they have positive attitudes towards the language. This does not however on the other hand suggest that when these can not use English then their attitudes towards it are affected. As we learnt from tables 9 and 13 whilst the amount of English used by the parents in both types of schools is different this is not reflected in their attitudes towards the language, as the correlations showed. As was suggested in the results section earlier on this issue, this means therefore that whatever impact this has on parents' children language proficiency their attitudes and the extent to which they use their language work in harmony. But the extent to which the language is used is more important than the attitudes as far as oral comprehension is concerned. The lack of any positive correlations in the writing and reading tests in table 9 seems very interesting.
Table 19: Parental Pro English Attitude and English Usage Scale: and Children's English and Zambian Language Proficiency

<table>
<thead>
<tr>
<th>TYPE OF SCHOOL</th>
<th>PRO ATT SCALE</th>
<th>PRO ENG USCALE</th>
<th>ENG PROFICIENCY OF CHILD</th>
<th>ZL PROFICIENCY OF CHILD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>ER</td>
<td>EW</td>
</tr>
<tr>
<td>PRIVILEGED</td>
<td>(\wedge)</td>
<td>(\vee)</td>
<td>(\wedge)</td>
<td>?</td>
</tr>
<tr>
<td>UNDER-PRIVILEGED</td>
<td></td>
<td></td>
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**KEY**

ER = English Reading  
EW = English Writing  
EC = English Comprehension  
VR = Vernacular Reading  
VW = Vernacular Writing  
VC = Vernacular Comprehension  
\(\wedge\) = Difference not significant
Among other things this suggests that the finding that underprivileged subjects did better than the privileged ones in English and vernacular reading and writing can not be explained in terms of either parental attitudes or the extent to which they use the language. We learnt that what influences pupils' language proficiency is mostly what their parents use. What this usage is all about is mostly speech and this partly explains why this influences their pupils' oral comprehension. Reading and writing are activities that we would all agree are rare in the homes. Let us expand this analysis further. When a child listens to his/her father/mother say something not known, it does not take long for that child to understand what the utterance designates because the utterance is contextualized. A child easily understands what the parent is saying because the 'referent' is often there. That is, the language is not used in isolation. What has been said so far about comprehension can not hold for reading/writing. This explains why, among the many techniques of English teaching, the audio-visual seems to be the most prominent in Zambia's Primary Schools.

What might explain the results here more accurately is the fact that while reading and writing are learnt in the artificial atmosphere of the school, understanding is a skill acquired more in a natural atmosphere than in the school. If the natural habitat is so effective in the learning of a particular skill then we would expect that a skill whose learning or teaching is done in a way that resembles the natural way, will be learnt more effectively and with ease. Attempts therefore should be made to ensure that the teaching of reading and writing
take place in an atmosphere as natural as circumstances can permit. One step in doing this would definitely be teaching the child these in his mother tongue since this is so close to him. The fact that teachers in underprivileged schools use more vernacular than their counterparts in privileged schools could have accounted for the difference in performance in the literacy skills involved. As Opitz (1972) notes:

"the mother tongue becomes effectively and cognitively associated with the individuals style of life... These associations extend to systems of literacy that become considered part of the mother tongue itself."(P.14.)

Since literacy does not have the natural original focus in; thrust that produces the efficient learning of the spoken language, it requires, in the words of Opitz (opcit)

"sustained, intensive functional reinforcement if it is to become natural, unassumed behaviour".

Parents if possible, should be encouraged to teach their children literacy in their homes.

4.10 CONCLUSION: Problems, Solutions and Recommendations

According to government Policy English should be used as a medium of instruction from grade one. This study has however shown that this is just a statement of intent rather than classroom reality. Classroom reality shows that instruction is both in English and Bemba. This study has therefore concluded that the language policy in Zambia should be the learning of English as a subject and the use of the child's mother tongue as a medium of instruction for the first three/four years.
The study has shown that the only problem with such a scheme is that the vernacular languages are not adequately developed as media of instruction and teachers are not trained to use them. Besides, the teaching of vernacular languages leaves much to be desired, due to problems of prestige and vocabulary. This study has recommended that vernacular languages must be developed so as to raise their status, and this among other things requires that materials must be prepared in the mother tongue and that teachers must be properly trained to teach these languages. In support of the thesis that every pupil should begin his formal education in his mother tongue as long as possible and as would be permitted by the supply of materials, the United Nations for instance asserts; "there is nothing in the structure of any language which precludes it from becoming the vehicle of modern civilization, that no language is inadequate to meet the needs of the child's first months in school, and that full self-expression can best be attained in the mother tongue" (in Hymes, 1964 p.529). The development of the vernacular languages would decide whether or not pupils' culture, traditions a.s.o. would be affected by the educational system.

The study has shown us that pupils' proficiency in the skills of comprehension, reading and writing are dismally low in both English and the Vernacular. As for vernacular among the reasons advanced have been that there is very little vernacular teaching and that there is a lack of appropriate teaching materials. The ZPCS' ineffectiveness was singled out as accounting for the low proficiency of pupils' English proficiency. Among the reasons were that the scheme was heavily loaded, very controlled a.s.o. This study has recommended that pupils' readers and texts in the
ZP course should be made less controlled and detailed. The content should be reduced; pupils should be made to do the reading individually, time is ripe to move away from the strict audio-lingual control throughout the lesson, to lessons beginning with control to freer interactional methods; writing should be taught and should be less controlled.

Finally, there is room for research into the major Zambian languages. The importance of the mother tongue in Education of children in their early years is certain. The problems of the mother tongue as a medium of instruction have been discussed and these can only be solved upon the following conditions.

(i) there must be a will on the part of the government to do so
(ii) committees must be formed to put forward the concrete proposals of specialists in African languages with a knowledge of all the language problems.
(iii) the considerable but widely scattered data must be collected and systematically classified and
(iv) the University of Zambia must provide courses in order to produce properly trained African Linguists to advise educational planners.

Time is now ripe for policy makers to devise policies that are based on empirical data and not intelligent speculations that often turn out to be far divorced from classroom reality.
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### Observation schedule showing frequency counts of incidents of English, Vernacular and 'Mixed' usage in Classroom instruction

<table>
<thead>
<tr>
<th>Grade: 3 English</th>
<th>1st 5 minutes of class</th>
<th>2nd 5 minutes of class</th>
<th>3rd 5 minutes of class</th>
<th>4th 5 minutes of class</th>
<th>5th 5 minutes of class</th>
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<td>Utterance's space</td>
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<td>V</td>
<td>M</td>
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</tbody>
</table>

**Instructions to observer:** An utterance will constitute a word, a phrase or sentence. Indicate by way of a tick in the appropriate slot when this is observed. Where possible write down the utterance in the space provided under correct sections.
Appendix B

English Writing Test.

Name ___________________
Grade ________________
School ________________
Guardians' Name ____________
Language spoken at home

Instructions: On the blackboard are pinned a series of drawings that make a complete story. Look at the drawings and carefully write a short story on the drawings in the space provided below.
A reading test.

Instructions to subjects: below are a number of sentences which you should read out loud, one at a time.

The boy and the girl are walking to the market.
The boy is wearing shorts and a shirt.
The girl is wearing a red dress.
She has a basket.

They see their father with a policeman.
He is wearing a uniform.
What are you doing, asked their father.
We are buying cabbages and oranges, they said.
Can you bring six bananas?
Yes, father.

The man is sitting on the road.
I am hurt, he says.
We can pull you to the pavement, they said.
Thank you, my name is Robert.

They went to the school to play.
This is their school.
They play every day with cars on the floor.

Mother is giving Jalita some milk.
Father bought her a bicycle from the shop.
He drove her home.

He flew over the river quickly.
From the sky he could see his house.
Stop at the crossing, the teacher said.
He made the roff out of grass.
We grow beans and tomatoes in the garden.
Appendix D

Vernacular writing test

Icishibishi (instructions): Pasicpampa pali ifikope ifyo ngamwalundenye fingapanga ilyashi limo. Fikolesheni bulno elyo mulembe po ilyashi pancende mushililwe panshi.
Amashindano yakubelenga (reading test) from a passage Kalulu na Nkalamo (The Lion and the Hare), icishibiaka: belenga aka kashimi munshila iya ololoka sana.

KALULU NA KALAMO

Inkalamo baupene cibusa naKalulu. Kalulu aipushe Nkalamo ati: "Bushe cacine hatini Nkalamo ilatina nga yaumfwa mukolwe alila; cine kuti mwabutuka fye nkoko?"

Inkalamo ati: "Cena cacine sana, mwana wesu; kabilili ici caba fye ifi fine kuli fwe nama nkalamha, pantu bonse twalikwata akamusango kamo akabuwelewele. Pambi nobe wne waliteshako ukuti kapoli nga abuluma, Insofu kuti yapapa nganshi yafulumuka no kufulumuka."

Kalulu bwangubwangu ati: "Iyoo cinecine mwandinatesha, pantu kanshi eco na ifwe fwe tuluulu tufulumukila nga twamona Imbwa."
Appendix F

Comprehension Passage: Cishibisho (instructions): Belengeni aka kashimi

Kwindi ne Nsofu


Comprehension Exercise: Cishibisho: Ukukonka nefilebelwe (Instructions) mu fyo wabelengwa asuka aya mepushyo.

1. Ico Kwindi aleya yufwila cinshi?
   a. Pantu tatemewa Nsofu.
   b. Pantu bakwindi bonse efyo baba.
   c. Pantu ena kwindi mukulu ukucila bansofu.
   d. Nico kwindi aishile nasambilila.

2. Kwindi pakweba ba Nsofu at "Wilaitikamika fyo matsikimatsiki" alocheshe mukiti:
   a. Iwe ulimukulu Sana.
   b. Iwe teti uleveba ilutu kuti yamuna.
Appendix G

Ukulondolola amapinda (Interpretation of proverbs): From J.T. Milimo (1972)

BANTU WISDOM LUSAKA Neczam

Icishibisho (Instructions 1): belenga ishi nsoselo/umilumbe and londolola ifyo chilepilibula.

B. (i)

1. *Akatsashi takalisha akalekelela kalalisha.
2. Akanwa ka mwefu takabepa.**
3. Uwauma nafyela omina limo.
5. Abanakashi mafi ya mpombo.
7. *Uwimine ukowa teminina.
8. *Aka kufwala kalacepa lelo akakulya takacepa.
11. Ubunang'ani tabulisha fisuma.
12. *Icikalipa cufwa umwine.
13. Ubushiku usheme ne cimbala ciloca.

*not from Bantu Wisdom.
**eliminated after the pre test
Appendix H

d. Nshishibe.
3. Kwindi pakweba Nsofu at kwena "uli uwalundukisha" alo seshe umukiti
   a. Nsofu mukalamba sana mumimonekele
   b. Nsofu mukalamba sana mnyaka yakufalwa
   c. Nsofu aba awalandikisha sana.
   d. Nsofu aba uwasenda ifilundu sana.

4. Ukulingana na mashiwi yakw a kwindi ubukulu bwa ba nsofu
   Mumimonekele bwalibabipila pantu.
   a. Echo yabakwatila mano nga ewa
   b. Teti bapupuke
   c. Pantu ifinofu fyabo fupalifina
   d. Pantu teti bendeshe elyo kabili apacepele teti bapitepo.

5. Bakw indi kweba ba Nsofu at, "Mona ine! Ine pano fye no kupupuka"
   baloseshe mukiti:
   a. Mona ine uko nalupupuka
   b. Mona ine nokupupuka ndapupuka
   c. Mona ine natamba ukupupuka
   d. Mona ine ukwanguka kwandi pamo no kupupuka.

6. Ba kwindi pansoselo iyi - baloseshe mui? 'kuti fye apali fi
   waiminina walatusha'. Salenipo icilungene.
   a. Baloseshe mukiti apalifintu bena ba nsofu kutusha
   b. Baloseshe mukiti ba Nsofu teti baci lauke apa na apa.
   c. Baloseshe mukuti bansofu bena batushefye nelyo ba enda fye
      panono.
   d. Baloseshe mukuti bansofu "bausu batusha apalolelemo.

7. "Kabili ntila nga nakupima nakulililako no bulanda"
   apa kwindi bapilibwile fiush". Salenipo icilungene.
   a. Bapilibwile ukuti ngabamona ubukulu bwaba Nsofu,
      balomfwa no bulanda
   b. Baloseshe mukuti balomfwa ubulanda ngababika pa Nsofu
      pali sekelo.
   c. Baloseshe mukuti ifilamba filapona ngabamona ubukulu
      bwa ba Nsofu.
   d. Nshishibe.
Appendix I

8. Bushe icacitike buli kwindz nicinshi pampele yelyashi?
   Salemo ici lungeme.
   a. ile uwa sansamuka panuma ya ku sehanya ba Nsofu.
   b. Alibutwike ba Nsofu at balamwipaya.
   c. Abati wike ba Nyau.
   d. Balimwipaye nokumulya kuli ba Nyau.

9. "Amufubukila" alepilibula shani?

10. "Misantwile" cilepilibula shani?

11. Bushe icalengele ukuti Nyau cimukalipe pa fyacitike kwindi
    nicinshi?

12. Londolola muli balaini babili ico twasambilila mo muli ili
    lyashi buli kwindi na Nsofu.
Appendix J

REVISED JANIS-FIELD SCALE

This scale has been used with a Likert format, but a semantic
differential format would probably be easier and faster. Wording
can be adjusted to fit each question:

e.g.,  Very  Fairly  Sometimes  Once in a great  Practically
     often   often       while        never

I. Items keyed so that an affirmative response indicates low self-esteem:

1. How often do you have the feeling that there is nothing
   you can do well?

2. When you have to talk in front of a class or a group of
   people your own age, how afraid or worried do you usually
   feel? (e.g., very afraid).

3. How often do you worry about whether other people like to
   be with you?

4. How often do you feel self-conscious?

5. How often are you troubled with shyness?

6. How often do you feel inferior to most of the people you know?

7. Do you ever think that you are a worthless individual?

8. How much do you worry about how well you get along with other
   people?

9. How often do you feel that you dislike yourself?

10. Do you ever feel so discouraged with yourself that you
    wonder whether anything is worthwhile?

II. Items keyed so that an affirmative response indicates high self-
    esteem:

1. How often do you feel that you have handled yourself well
   at a social gathering?

2. How often do you have the feeling that you can do everything
   well?

3. When you talk in front of a class or a group of people of
   your own age, how pleased are you with your performance?
   (e.g., very pleased).

4. How comfortable are you when starting a conversation with
   people whom you don't know? (e.g., very comfortable).

5. How often do you feel that you are a successful person?

6. How confident are you that your success in your future job
   or career is assured? (e.g., very confident).

7. When you speak in a class discussion, how sure of yourself do
   you feel?
Appendix K

Name
Name of School
Grade
Sex
Language spoken at home
Guardian Name

The Revised Janis-Field Scale

Instructions: below are questions that you are requested to answer as faithfully as possible by selecting the appropriate response from the following: Very often, Fairly often, Sometimes once in a great while, practically never.

Vernacular panshi apa pali amepusho aya mufwile ukuwasuka ukilihanga nefyo umfwa wemwine. Ulemba icishika mukusalapo chimo pali iyi miku:

imiku iyingi sana, imushita shimoshino linono sana nangu lingo

1. Miku inga umfwa ukuti tapali umulimo winga bomba bwino ngacakuti ulebmfwya ululimi lobe.
imiku iyingi sana, munshita shimoshino, linono sana, nangu lingo

2. Miku inga umfwa ukuti kuti wabomba imilimo yobe yonse bwino ngacakuti ulebmfway ululimi lobe?
imiku iyingi sana, munshita shimoshino, linono sana, nangu lingo

3. Ilyo wacatekelwa ukulanda kubabiyo mukalashi, miku inga 4 utinw ukucita ici nangu miku inga usakamana?
imiku iyingi sana, munshita shimoshino, linono sana, nangu lingo

4. Nga ulelana kuntu mba lohi mukalashi usambiliila miku inga uba uwa naanza ukubomfya icitundi chobe.
imiku iyingi sana, munshita shimoshino, linono sana, nangu lingo

5. Miku inga usakamana ukuba mukabungwe kababiyo usambiliila nabo abalelanda icingelesho ilyo icycle ulebmfwya ululimi lobe.
imiku iyingi sana, munshita shimoshino, linono sana, nangu lingo

6. Miku inga umfwa bwino ilyo 3 ulelana ilyashi mabo nobe usambili nabo ngawamba ukusasa mululimi lobe.
imiku iyingi sana, munshita shimoshino, linono sana, nangu lingo
Appendix I

7. Miku inga ucushiwa nensoni shobe kumulandu wakubomfwa ululimi lobe ilyo uli mu sukulu.

imiku iyingi sana, munshita shimoshimo, linono sana, nangu limo.

8. Miku inga utontonkanya ukuti walipalwa mufyo cita kumulandu wakulimi lobe

Miku inga utontonkanya ukuti walipalwa mufyo cita kumulandu wakulimi lobe

imiku iyingi sana, munshita shimoshimo, linono sana, nangu limo.

9. Miku inga umfwa ukuti walipa uwashyalila kuba mbe mu sukulu bena abalanda icycleshi inshita ingi.

imiku iyingi sana, munshita shimoshimo, linono sana, nangu limo.

10. Miku inga utontonkanya ukuti imikalile yobe kuntashi ikaba bwino kumulandu wakubomfya ululimi lobe?

imiku ingi sana, munshita shimoshimo, linono sana, nangu limo.

11. How often do you ever think that your speaking your mother tongue makes you a worthless individual in class?

very often, fairly often, sometimes once in a great while, practically never:

12. When you discuss ideas in class, how often are you sure of yourself when you use your mother tongue?

very often, fairly often, sometimes once in a great while, practically never.

13. How often do you feel that you dislike yourself because of your use of your mother tongue?

very often, fairly often, sometimes once in a great while, practically never.

14. How often do you feel that you are a person of worth as far your other tongue is concerned?

very often, fairly often, sometimes once in a great while, practically never.

15. How often do you ever feel so discouraged with yourself for using your mother tongue that you think it is not worthwhile?

very often, fairly often, sometimes once in a great while, practically never.
Appendix M

6. How often do you get discouraged at what you are doing if you are doing it in your mother tongue?
   very often, fairly often, sometimes once in a great while, practically never.

7. How often do you feel self-conscious of your mother tongue?
   very often, fairly often, sometimes once in a great while practically never.

8. How often do you feel proud of your school work when this is done in your mother tongue?
   very often, fairly often, sometimes once in a great while, practically never.

9. How often do you feel that you have handled yourself well at a gathering of people who do not speak your mother tongue?
   very often, fairly often, sometimes once in a great while, practically never.

10. How often do you feel quite confident when leaving a new topic in your mother tongue?
    very often, fairly often, sometimes once in a great while, practically never.
Appendix N

Guardians/Parents Questionnaire

Instructions: Please fill in this form as accurately as possible for respondents who do not handle the English language you are permitted to seek help from those who speak the language.

1. Name: ______________________

2. Sex: ______________________

3. Age: ______________________

4. Residential Area: town/village ______________________

5. Place of Birth: ______________________

6. Level of Education reached: ______________________

   None: Primary; Junior Secondary; Senior Secondary College; University Post-Graduate.

7. Occupation: ______________________

8. English spoken? ______________________

9. Where, at home or at work for business (Tick the appropriate)

10. Do you speak in English to your
    Children never, sometimes, often or always

    Wife

    Relatives

    Friends

    Boss at work

11. Do you speak in Vernacular to your children never sometimes often or always

    Wife

    Relatives

    Friends
Appendix O

12. Do your children speak to you in English?
   Never sometimes often always.

13. How important is a Zambian language for your child?
   Very important, important, not important.

14. On the average English is used more frequently in my home
    than Vernacular.
   Agree, Disagree, I don't know.

15. English language in the most useful language in my life today?
   Agree, Disagree, I don't know.

16. The best subject and most important subject my child is
    learning in School is English?
   Agree, Disagree, I don't know.

17. I am happy that my child is being taught in School
    in English?
   Agree, Disagree, I don't know.

18. To be recognized in society today you have to know a bit
    of some English language?
   Agree, Disagree, I don't know.

19. As far as the modern world is concerned both English and
    my Vernacular are playing important roles.
   Agree, Disagree, I don't know.

20. A Vernacular should be introduced for our official language?
   Agree, Disagree, I don't know.