

The Threshold Project this year was instrumental in changing the law on language policy in school. *Eager to Talk and Learn and Think* will continue to have a profound effect on curriculum policy, materials development, teaching practice and research methodology for many years.

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Documents produced by the Threshold Project and used as source material for this book:

1. Crossing the threshold into Standard 3 in black education: The main report of the Threshold Project. C A Macdonald
2. How many years have you got? English Language skills evaluation. C A Macdonald
3. Ballpoint pens and braided hair: an analysis of reasoning skills and the curriculum. C A Macdonald
4. Swimming up the waterfall: a study of school-based learning experiences. C A Macdonald
5. The disparity between English as a subject and English as the medium of learning. W van Rooyen
6. Standard 3 General Science research 1987-1988. C A Macdonald

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Solly M. is a young person of 16 who is now in Standard 4 (sixth grade) in a school in Winterveld which is a very poor area. His school is under the jurisdiction of the Bophuthatswana Department of Education. Solly's mother tongue is Southern Ndebele, but he learned to read through the medium of Tswana (which is from another language group). Solly has failed four years so far at school, and he has a great deal of trouble understanding any English. His Afrikaans is a little better. Solly is looking forward to dropping out of school after Standard 5. He does not want to go to trade school, as his father, an illiterate builder, dearly wishes. His prospects for getting a job as an unskilled labourer are extremely slim for two reasons. Firstly, because of his poor education, and secondly, because of the poor economic climate in South Africa.

Jan D. is also 16 years old and in Standard 4 in a Setswana medium school in Mamelodi, a well-established Pretoria township. He started school late, and has only failed twice. Jan is being brought up by his grandmother in a house just opposite his school, which is known for being well-run, and has the best facilities which could be offered by the Department of Education and Training. Jan's grandmother is Zulu speaking, and although she has very little formal education, she speaks Pedi to her husband, as well as the local township version of Tswana and colloquial Afrikaans. Jan is shy and retiring. His grandfather (a retired policeman) rules the family very strictly. Jan cannot carry out a conversation in colloquial English. He has no idea of what he wants to do after he has completed his formal schooling.

These two boys are known to all of us working on the Threshold Project; we can see that they come from two very different backgrounds but they also have much in common: both have failed several standards; both lack self-confidence; both are unable to use English in a meaningful

way whether they are in school or chatting informally. Both boys feel that they do not belong to the world of the school, even though their families strongly believe that only through education will the boys have a hope of a better future.

Solly has recently left school and found a job as a security guard, which does not require literacy skills. Jan is continuing his education and is now in Standard 5.

The stories of Solly and Jan give us some insight into the educational problems facing millions of young people in South Africa today.

When they start school they are taught in their own language (or another African language), but when they reach Standard 3 they have to move over to English as the medium of instruction (the language in which all of their teaching and learning must be done.). The problems which this language change creates for pupils and teachers are what the Threshold Project's research was all about.

At the back of this book there are worksheets intended for use by interest groups, communities and teaching-learning situations.



The Threshold Project



1.1 History

The Threshold Project is a five-year project of independent research which has been carried out by Dr Carol Macdonald and a team of fellow workers. The project, which began in 1985, was commissioned by the Institute for the Study of English in Africa (ISEA) based at Rhodes University and has been supported by the Anglo American and De Beer's Chairman's Educational



The Threshold Project work was done in classrooms such as these.

Trust Fund. This book forms part of the Threshold 2 Project, which aims to make accessible to a wider group of people the knowledge which the researchers gained in the first project.

1.2 Research objectives

The Threshold Project's objectives were to look at the learning experiences of young African children when they are in Standard 3, the year when the medium of instruction changes to English. The researchers looked for answers to the following questions:

1. What do young African children going from Standard 2 to Standard 3 know about the English language and what can they do with what they know?
2. What can we find out about the children's thinking skills that will help us to understand how they go about the learning tasks which they meet at this level in school?
3. Up to the end of Standard 2, children learn English as one subject amongst many others (English-as-a-subject). From the beginning of Standard 3, children are expected to learn as many as ten subjects through English (English as the medium of instruction). How well do the English courses which children study from Sub B (second grade) to Standard 2 (fourth grade) prepare them for the English which they are going to need when English is the medium of instruction from the beginning of Standard 3?
4. How do children's school experiences help or hinder their learning?

The detailed answers to these four questions helped the researchers to produce a set of principles or key ideas to help everyone involved in educational planning. It is also their hope that these key ideas will play a creative role in transforming the quality of education for a society in transition.

1.3 Research findings

Although this whole book is based on the Threshold Project findings, the rest of this chapter summarizes these findings, so that readers can bear them in mind when reading the rest of the book.

(a) Language knowledge and skills

One of the main findings of the Threshold Project is that children are not ready to learn up to ten subjects in English when they enter Standard 3.

They are unready for two important reasons:

1. The children's listening, speaking, reading and writing skills are poorly developed in both the first and second languages. Any further progress that the children will make in school depends on these four skills.

2. The whole learning situation from Sub A to Standard 2 is too limited to prepare the children for the range of skills which they will need from Standard 3 onwards. Both teachers and children need to learn new ways of teaching and learning in order to widen the children's range of language experiences and skills.

(b) Thinking

Children's thinking is affected in a number of ways. The immediate environment (things, people and places children find around them), as well as different traditional ways in which parents bring up their children, all affect the kind of thinking which children develop.

Each culture has a very firm set of beliefs about the ways in which adults and children should relate to each other. These beliefs in turn influence the ways in which teachers and children relate to each other in school. Beliefs in a society at large, which also filter through into the smaller world of the school, influence the way in which teachers and pupils go about the learning tasks, which schooling demands. In fact these beliefs deeply affect the very kind of tasks which children are regularly asked to perform. This means that the same syllabus (or list of contents to be covered) can lead to very different kinds of things being done in different classrooms.

Children with an African upbringing may find school very bewildering if they do not have enough help in learning to do new and different tasks in new and different ways. Schooling as we know it in South Africa today is largely the creation of an urban, technological, industrialized culture. It follows that the tasks and the thinking skills which those tasks require are largely those found in an urban, technological culture.

One of the most important discoveries of the Threshold Project research was to uncover the extent to which the differences — between the kinds of task and the ways of going about such tasks — create the difficulties for so many South African children. These differences are something of a surprise both for people who are themselves products of a formal schooling system and for those from other cultures who are beginning to enter that system. One of the most important recommendations of the Threshold researchers is that both teachers and pupils need to be shown clearly what new ways of thinking a formal education requires and how those new ways can be both taught and learned.

(c) English as subject and as medium of instruction

The present syllabus for English-as-a-subject from Sub B (second grade) to Standard 2 (fourth grade) does not provide a strong enough foundation for using English as the language for learning ten subjects from the first day of Standard 3. This means that, even if children could do everything that is expected of them in a Standard 2 English course, they will not have enough



Resources in many schools are almost non-existent. These Khayalitsha children learn to write in sand on the classroom floor.

English to cope with the demands of Standard 3. In addition, the researchers found, through testing different groups of children, that the English of many children in Standard 3 is well below a passing level for Standard 2 English-as-a-subject. A new syllabus which takes into account the children's need for English as the medium of instruction is urgently required for the whole of the primary school phase. This was another important recommendation of the Threshold Project.

The Threshold Project researchers were able to describe in great detail the differences between the English the children have by the end of Standard 2, and the English demanded by the syllabus, the textbooks and the learning tasks in Standard 3. Based on this description they were then able to make

suggestions about how the huge gap which they had discovered and described, could be closed. However, the language problems alone are only one aspect of the difficulties which former Standard 2 children face at the beginning of Standard 3. There are other needs:

- ▲ a good grounding in the child's own language;
- ▲ equipping teachers and pupils to use materials based on new principles; and
- ▲ a transformed learning situation (curriculum) which changes the kind of learning experiences which the children meet.

The present situation in South Africa calls for a critical re-evaluation of our language policies. There is reason to believe that the original, highly technical Threshold Project Final Reports played an important part in the repeal of the act of parliament which insisted that the change of medium of instruction could not take place before Standard 3. Already various experiments in the field of multicultural, multilingual education are taking place. What is required now is a very careful monitoring of these "real life experiments". This monitoring should then lead to a careful and critical weighing up of the advantages and disadvantages of each new "experiment", so that South Africans in general will be able to make well-informed decisions about future educational policy.

(d) School-based learning experiences

Threshold researchers observed a variety of schools, but focussed their work on the Primary Education Upgrade Project (PEUP) in Bophuthatswana. The researchers found that the teaching style in this project is a locally developed



In the Primary Education Upgrading Project, the junior primary phase may be pleasant, but it is not enriching enough to prepare learners for Standard 3.

mixture of traditional kinds of teaching, which focusses on covering the syllabus, and a more progressive kind of teaching which places the child at the centre of the learning experience.

The Threshold Project looked carefully at how the children's learning experience in the classroom is affected by the teachers' values and the role that the teachers expect the children to play in the teaching and learning process. From our observations we concluded that the local teaching style needs to be further developed, especially in the higher primary school. The range of school-based learning experiences needs to be expanded both by the development of materials which are suited to the needs of pupils and teachers, as well as major changes in the whole learning situation (or curriculum).

1.4 New approaches in the classroom

Thinking and language are very closely connected. Any new curriculum should take this very seriously and try to bring together (integrate) thinking skills and language skills in every activity which is recommended. It is only an integrated approach like this which would be able to make real the process of transformation in the school.

We have described above the four major related problems which we found contribute to the overall problem confronting the children as they go into Standard 3. This led the researchers on the Threshold Project to recommend the creation of what we called a "transitional learning situation". A project such as Threshold could have described the ideal changed situation towards which a transformed educational system should be moving. But it is unlikely that teachers who are working within the present system would be able, in a short space of time, to fulfil such ideal recommendations. What is both likely and possible, however, is that with some in-service training and appropriate materials, teachers can begin to move in the direction of positive change. Therefore, in classrooms in which teachers have elected to become part of the process of change, the learning situation will for a number of years, be in a state of transition. **It is important for readers to realise then that the recommendations which are contained in the rest of this book, represent only one stage in what the researchers see as an ongoing process of transformation (positive change).**

Our recommended learning situation would also be transitional in the sense that where the present situation requires an impossibly difficult leap from mother tongue as medium of instruction (up to Standard 2) to English (from Standard 3), the Threshold researchers recommend a gradual transition from the use of the children's first language to the use of their second language. Both the first and second languages are important for the learners' development. Moving slowly towards learning content in a new language in a way that is both carefully planned and controlled will help children to manage change much better than they do now. One of the most important advantages



This farm school has few resources to help the teacher prepare the learners for senior primary, but look at the drawings which the teacher has done. The teacher is a resource not to be underestimated.

of our proposed transitional approach, is that the children will have a chance to learn a lot in their own language while they become much better prepared to learn the content subjects through a new language. Many African parents believe that their children will only make the progress which they desire for them in schools where English is the medium of instruction. The findings of the Threshold Project have tended to reaffirm the value of children beginning their school career in the language which they know best. Our proposed transitional approach would combine the parents' desire (for proficiency in English) with sound educational practice. At the same time, it would give the children the benefit of a sound basis in their first language, while preventing the erosion of our richly diverse cultural heritage.

All societal and personal change is painful and requires of those who are undergoing it that they should be able to give up long-held beliefs, attitudes and practices. This is just as true of change in education. The Threshold researchers have taken great care to recommend changes which they hope will make sense to teachers and will be manageable. They have also genuinely tried to respect African parents' thirst for their children to have proficiency in English.

The researchers hope that the information in this book will help to change schools for the better. We also respect the idea that "**Kgetse ya tsie e kgonnwa ke go tshwaraganelwa**" ("When the sack is full of locusts, everyone must help to pick it up"). It is important for everyone to work together to provide the best possible education for the children of the future.

Worksheet 2 is on p 77. The answer-sheet is on p 85.



CASE STUDY



How difficult is it to think in an unfamiliar language? Imagine that you have learned Estonian for 350 hours. (Your 350 hours of Estonian is roughly the time that African children have for English in school before Standard 3.) Estonian, like English, is unrelated to any of the languages native to South Africa. If you think about it, a child born into an Estonian household would hear up to 3 or 4 times as much Estonian in the first six months of life. By the time a child reaches school, he or she will have absorbed many thousands of hours of Estonian. Now you, with just 350 hours of Estonian have to learn what the equator is and how to do long division . . .

The truth is, you have learned a minimum of Estonian, hardly enough to understand very simple communication. And now you have to learn to do difficult things in the strange new language.

When the teacher explains—in Estonian—about the equator, you will find it difficult to follow. Think about the English words needed to explain what the equator is: "imaginary line", "globe", "divides", "two equal parts", "hemispheres" etc. You could be forgiven if you did not understand the explanation because you did not know most of these words in Estonian.

Afterwards you still do not know what the equator is, not because you are stupid, but because you do not understand Estonian. (In fact, you may know very well what the equator is, but not know that it was being discussed.) Your thinking is limited by having to learn in Estonian. This is what is meant when one says that it is not good for children's education when they have to learn in a new language that they have not mastered properly.

BALTI TEE

**Kõne Balti Assambleele pühendatud rahvakoosolekul
Tallinnas Raekoja platsil 13. mail 1989**

Viis tuhat aastat tagasi asusid Balti mere idakallastele elama eestlaste esivanemad, neli tuhat aastat tagasi — lätlaste ja leedulaste esivanemad. Tuhandeid aastaid tagasi põimiti Baltimaade rahvaste vahel tihedad

sidemed, mille tunnistuseks on üksteisele laenatud sõnad, tarkused ja oskused, ühised jooned Baltimaade kolme rahva kultuuris. Ja kuigi iga rahva ajalugu ja kultuur on kordumatud, kuigi leedu hõimud löid iseseisva Leedu suurvürstiriigi juba XIII sajandil, eesti ja läti hõimud aga kaotasid samal sajandil oma muistse iseseisvuse, on Baltimaade rahvaste ajalooline tee XVIII sajandi lõpust jälle ühine ja jäänud ühiseks tänapäevani.



What it means to be in Standard 3

One day all the animals in the village began to fight.

The Elephant said he must be the chief of the animals because he was the biggest.

The Lion said he must be the chief because he had a loud voice.

The Hyena said he must be the chief because everyone was afraid of his laugh.

Pollution is caused mainly by big factories, industries and the mines which use water. This water passes through various machines and becomes poisoned and dirty. Many of the chemicals used by farmers are washed by rain into the rivers, making them impure. Even mud from our lands makes our rivers brown, spoils the water for our use and, in time, fills up our dams.



2.1 Learning in a second language

If you were an African pupil in an ordinary government school in southern Africa, the first extract could have come from the end of your English reader in Standard 2. And the second extract could be one of the first things you have to read in a Standard 3 Geography textbook. You do not have to be a language expert to see the jump from the first piece of writing to the second: the English reading book recognizes that this is your second language. Some Geography books, like the one we have quoted from, *do* try to make things simpler for the learners, but this is a complex job, which has yet to be mastered by most authors.

In the very first sentence, there are four or five words which the learner will probably not know: **pollution**, **caused**, **factories** and **industries**. The paragraph does not explain what pollution is. You would have to guess from the examples given in the paragraph, which would be difficult if you do not know what other

words like **poisoned**, **chemicals** and **impure** mean. You might not understand the link between the factories and the farmers — it certainly is not obvious, if you do not already know what pollution is.



This is a typical urban school in Bophuthatswana. Western, formal schooling is supposed to create suitable citizens for urban, industrial societies.

If you were an African pupil in Standard 3, you would find that you, the other children and the teacher were suddenly all supposed to be speaking English. In your Standard 2 class, you all communicated quite easily in your own language about the things you were learning. Now, in theory at least, you would be learning as many as ten subjects in English, and English would be expected to be the classroom language.

Very few people are aware of what it means to change from learning in one language to learning in a different language. The African Standard 3 teachers, who have to deal with the changeover, have had to struggle with the effects of this policy. The work done in the Threshold Project has helped people to see more clearly what the difficulties are — both in terms of language learning *and* general learning. There would certainly be additional factors to the ones we discovered — the Project does not claim to have researched all the factors in the situation. But we tried to see how various factors work together to make the children's and the teachers' tasks difficult to achieve.

2.2 Increase in learning

There is a big gap between what the children have to know at the end of Standard 2 and what they have to cope with in Standard 3. The jump between standards is very clearly illustrated by what happens to the subject

Environmental Studies. In Standard 2, the subject occupies the children for three periods a week with rather vague topics. In Standard 3, Environmental Studies splits into History, Geography and General Science, which are all very specialized and have specific vocabulary. Each subject takes up two, three or four periods a week.

Here is a sample of the vocabulary load on a Standard 3 pupil over a three-day period for only three subjects: History, Geography and General Science.

Geography:	rotation, imaginary line, equator, planet, globe, heavenly bodies, hemisphere, continent, island, ocean, coastal plain, escarpment, plateau, relief
History:	appoint, refreshment, journey/voyage, expedition, depart, fort, barter, diary, industrious, inferior, tedious
General Science:	germination, mineral salts, adventitious (roots), radicle, embryo, fibrous (roots), vegetative reproduction.

The volume which children have to learn in Standard 3 is reflected in the pile of textbooks they have (or are supposed to have): one book each for Geography, History, Health Education and General Science, as well as a Mathematics book and books for three languages. The content subject books are in English, about 400 pages in all. If the English teacher did her job properly over three years of schooling (Sub B to Standard 2), learners may have a vocabulary of about 800 words. Now, in Standard 3, they will suddenly need a core vocabulary of about 5 000 words in English to cope with all these new subjects. That supposes an increase of 600%, which would be unreasonable even for first language speakers of English.

2.3 Change in teaching style

It is not only the change to English as the classroom language at the beginning of Standard 3 which is problematic. Very often the teaching style also changes. In the junior primary classrooms, especially in the Primary Education Upgrading Project (PEUP) classrooms in Bophuthatswana the teachers play the role of a mother. The teachers are patient and accepting but remain the centre of control. They are the authority and they direct the flow of activity. The pupils look to the teachers for direction and will willingly carry out their instructions. Quite a lot of the teaching is done by means of group work and the children often have confidence and some sense of being able to manage their own learning.

When the children in Standard 3 begin learning in English, many of the earlier positive things in the learning situation are lost. The Standard 3 teachers are often authoritarian. The teaching becomes "talk and chalk". This

change of style is, in part, due to the teacher's lack of confidence in having to use English. Now the children are no longer involved in group activities where they manage their own work. They are passive. They simply have to receive information now instead of actively taking part in the learning process because that is how the teachers expect them to be. Because the textbooks are too difficult for the children, especially in terms of language level and vocabulary, the teachers have to use the children's first language to make sure they understand the information. This information is reduced to a summary in English which the teacher makes and writes up on the board. The children are then supposed to write down the summary and the children's learning is reduced to learning by rote the few disjointed facts they have written down.

The appropriate method of child-centred groupwork at the higher primary level would involve the children doing projects in groups. To do this, the children would need considerable learning resources, the ability to discuss new ideas in English and finally they would need to see learning as a problem-solving activity. Any of these requirements would seem to be difficult to meet at this time.

Learning appeared to be fun and purposeful in Standard 2; by the end of Standard 3, much of the pleasure and purpose has gone. Instead of being involved in meaningful and enjoyable activities, the children often have to parrot what the teacher has just said. We found that a number of the teachers do not believe that their learners have anything to contribute to the learning-teaching process at this stage in their education.

2.4 The use of questions

In higher primary classrooms, the person who generally asks questions is the teacher. Often the questions just require the whole class to say, "Yes". The purpose of such questions is to make sure that the social link between the teacher and the learners is maintained, so their reply, "yes", does not always mean that the children understand. When teachers ask other questions, they are almost always questions starting with the word "what". These questions are easy to answer if the children remember what the teacher has just said. In other words, these questions do not test genuine understanding.

Questions which *would* test the children's understanding are rarely ever asked. There could be more than one reason for this situation. First of all, teachers may know from experience that their learners cannot answer such questions because their English is not yet adequate enough to cope with understanding such questions.

Here is an example of typical content subject text at Standard 3 level:

Every muscle in your body is able to make some part of your body move. Muscle is made up of special cells that can relax and contract, rather like an elastic band. All muscles are of two kinds, voluntary and involuntary.

Consider this health education passage which we used in our dictation test research. We are fairly sure (looking closely at the children's written texts) that this is how the passage would seem to the pupils reading it:

Every sumcle on your body is labe to karm some pats of you body move. Sumcle is make up of special sells that can lerax and tractcon tharer like and saletic ban. All sumcles are of two kinds nulovtary and in nulovtary.

The passage would not make sense to the children because of the high density of unfamiliar words, and the replacement of some unfamiliar words by other similar words. Now, the teacher, if she was conscientious, might want to question the class to see if they understood it. She would be interested in the "facts" which the passage contains, and so her questions would be straightforward. First she might ask, "What are muscles able to do?" which the children would hear as, "What are sumcles able to do?" Back comes the answer, "Sumcles are labe to karm some pats of you body move." The next question would be understood as, "What is sumcle made of?", and the children might readily reply, "Sumcle is make up of special sells." Another obvious question might be, "What are the two kinds of sumcle?" To this the children might say, "The two kinds of sumcle are nulovtary and in nulovtary." The lesson proceeds and the pupils are able to answer quite intelligently, **in the words of the passage which they do not understand.**

The most important deduction to be made from this example is that when pupils are confronted with a written passage (or even spoken discourse) which makes no sense at all to them, it is perfectly possible, as McGregor (1971)¹ puts it, "for questions and answers to go to and fro in the time honoured fashion". Crucially, they may not know what the words mean, but they do know that they are the words which the teacher wants. Although no real understanding of the passage is possible, because the children do not know the meaning of many of the words (and also distort the grammar), behaviour which looks very much like understanding can and does take place. This kind of teaching forms a closed loop from which genuine information about what is not understood can simply *not* escape; the teacher is safe as the controller of knowledge.

The second reason why genuine questions are rarely asked is that the traditional African way of teaching is based on different ideas. Learning happens in an informal way, where children learn to do tasks by observing and then trying to do what they have seen. Or, when an adult is trying deliberately to teach a child something, then the roles of teacher and learner are very clearcut: the teacher is the one-who-knows while the learner is the one-who follows. It is important for us to recognize the presence of these ideas, because they affect what is happening in the classroom.

It is important at this stage to recognize that these African ideas about learning and teaching will have a role to play as a new, indigenous classroom style evolves. Such a new style will take the best from the formal educational style and accommodate it to the best qualities in the African view.

¹ We are indebted to McGregor (1971) for the idea of demonstrating how the lack of understanding can be obscured in asking for facts in this fashion. (From McGregor G. P. 1971. *English in Africa: A*

2.5 The importance of the teacher's role

The teachers in African schools face a variety of problems, many of which have been talked about in the newspapers and on TV. This section will only deal with a few of these difficulties, especially as they relate to the problem of teaching and learning in a second language. Two things need to be said at the outset. The first is that the following observations are not intended to point fingers at the teachers or to blame them; the Threshold researchers are aware of the demands which the present system places upon the teachers. The second is that we believe that **the teacher's role as a mediator (negotiator) is crucial**. Teachers always have to mediate for the children. They have been given the additional task of introducing the children gradually to a second culture — a complex culture which expects people to know about things like computers, electricity, and other emerging technology. The way in which the teachers carry out this task is very important. Ideally, the teacher can create opportunities for the children to learn about the new culture without reducing their participation in their own culture. We should make people aware that it is possible to get children to value their own culture as well as a second one.

2.6 Teaching styles as limitations

Many teachers have come through the Bantu education or DET (Department of Education and Training) systems and have rarely experienced excellent teaching. And so, understandably, many teachers rely on what they commonly experienced when they were at school. That method is the “rote-rhythm” method of teaching, which has already been partially explained. In this method of teaching, the teacher drums facts into the learners by means of drilling. The learners are expected to learn by chanting, the responses to the teacher's questions. The method does not allow for any checking on whether the learners *really* understand the material. The younger teachers have been taught about progressive, communicative and group-based methods of teaching at teacher training college. However, when they go into the schools, they are soon disillusioned because of poor teaching conditions, and they fall into the patterns that have already been set by the older teachers: a teacher-centered authoritarian approach.

These comments are obviously not true of all teachers, and the Primary Education Upgrading Project in particular has managed to develop teachers who understand that everyone needs to be actively involved in the learning process. These teachers have been able to bring the positive, caring aspects of the African model of learning back into the classroom. They have also reinterpreted the learner's involvement in the learning programme in a way that is harmonious with both traditional and modern models of teaching and learning. It is a pity that these positive qualities are limited to the junior primary school at present. An important area of educational development lies

in getting teachers to develop a system for the higher primary that follows on the good work done in the junior classes in PEUP schools.

The role which the teacher adopts is one of the biggest drawbacks or one of the biggest headstarts experienced by learners. One of the reasons why the Threshold Project was interested in teaching styles was to see what effect these had on the children's thinking. Research has shown that when pupils changed teachers, 80% of them changed their behaviour to fit into the new teacher's teaching style, while none of the teachers changed their styles to fit in with the children. In other words, an effective teaching style can help children greatly, because they respond so well to teacher initiative. A teacher can create a learning situation which provides both support and challenge. Under such favourable conditions, most learners will blossom.

2.7 The difficulties of teaching in a second language

Teachers also struggle with another major handicap. They have to teach in a second or third language. This is a major disadvantage. The teachers **know** they are supposed to teach in English. They also know that their learners will probably not understand if they do so. It is a very unpleasant situation for teachers to be in. If they teach in English, as they are supposed to, they can be sure their teaching is not effective. If they teach a difficult topic, say in General Science, in the mother tongue, they are unlikely to help children match the concepts in the mother tongue with the concepts in English. This would require a specific set of skills which teachers are not trained in. Extra time is obviously required for this kind of teaching. There *are* teachers with a good knowledge of English who use the language well in the classroom, but this is rare.

The teachers' difficulty with English can be seen in the explanations they offer, in the summaries they make, and in the way they use materials, often not in the way the materials were designed to be used. All these shortcomings are understandable in terms of the quality of the teachers' own education. So, it is necessary to raise the standard of the teachers' English, general knowledge and teaching skills, to meet our commitment to develop the upcoming generation of learners properly. This process will take time, money, and enlightened understanding of the importance of the teachers' role.

2.8 The four tasks of teaching

The study of school-based learning experiences — an important part of the project's aims — examined the situation in terms of how the teachers managed what we called their “four tasks”:

- ▲ they must present that which they want to teach (mastery);
- ▲ they must give their children opportunities to learn that which is to be learned (coverage);

- ▲ they must get the class to work together in the interests of getting their attention on tasks (management);
- ▲ they must be sure that pupils are both ready for and interested in learning (getting positive attention).

Firstly, there is the task of “mastery”. Every year children are faced with a new set of skills and concepts; these concepts are spelt out in the syllabus, but the concepts are not always apparent in the children’s work. It was difficult to know exactly what was expected of the children because they rarely had any learning materials (e.g. workbooks). However, the following factors led us to the conclusion that there is a lack of mastery in both English and the other subjects:

- ▲ the absence of learning materials;
- ▲ the overuse of creative writing exercises;²
- ▲ the poor quality of the teachers’ notes;
- ▲ the lack of feedback to the children; and
- ▲ the results of our own tests.

Secondly, there is the related task of “coverage”. Here the teachers must give their children opportunities to practice that which is to be learned. Teachers generally expect very little initiative of their children, and this affects the pace at which the children work. As the children get very little done, the teachers get through less work than they should. The low expectations can be changed though; for example, before the introduction of the **Breakthrough to Literacy** courses, it was thought that Grade 1 children could only write letters, not words. Now the teachers are quite used to receiving extended writing from children by the end of Grade 1. However, the work programmes are generally too ambitious, and textbook writers tend to add too much detail to their texts.

Thirdly, there is the “management” task of the teachers, and here we find that there is a problem of “time slippage”. It is difficult to get through lessons quickly with a large number of children in the class — for example, children may have to wait their turn to use lesson materials or even pens and pencils. Teachers do not manage their daily work programme very closely, and they don’t monitor their yearly programme accurately. Teachers could be taught how to manage time efficiently, for example, and encouraged to leave out irrelevant parts of the long syllabuses. Also, if the learning tasks are more meaningful for the children, they get through them more quickly and with enthusiasm.

² Here we are referring to the PEUP tendency of getting children to do creative writing in subjects like Environmental Studies, where more structured work is appropriate. Other departments such as the DET have come in for criticism because creative writing is almost totally absent.

Fourthly, the task of the teachers is to bring the children to a point where they would like to learn, even though, in practice, they do not have a great deal of control over what or how the children learn. The control of affect (emotion) is clearly in the hands of teachers, who usually have passive and obedient children. The children watch the teachers for signs of approval and disapproval very closely.

In practice, the teachers seem to have a very practical approach to their children’s emotions; they think they have a job to get done and they are not entertainers and don’t need approval from their children. However, they do have expectations about what good learning behaviour is: it means doing what is expected of you and not trying to do more than that unless you are asked. This part of our research was something we felt should be followed up, as it was particularly interesting.

Worksheet 3 is on p 79. The answer-sheet is on p 86.





Robert Siyo has been at a private boys' school from the day he started school. His father, a clerk in the Transkei embassy, drops him and his brother, John, off at the school every morning. There Robert joins up with his best friends, Farrington and Daoud. They all chatter excitedly, especially when Daoud brings some of the delicious Indian goodies which his mother makes.

When Robert was ten, he told his parents that he wanted them all to speak English at home. At first they were impressed and a little amused. When Cassius, Robert's father, realized that his son refused to respond when he spoke to him in Xhosa, he was furious. Caroline, his wife, sided with the child, saying how important it was that the children's English be good. Cassius has given in to the pressure but feels uneasy in his own home, especially when the boys moan at him for watching a programme on TV2 or 3.

When Robert's grandmother came from Umtata to visit, she was horrified to find that her grandchildren refused to reply to her in Xhosa even though they understood what she was saying. When she tried to persuade Cassius and Caroline to send the boys to her for two years so that they could learn Xhosa again, the boys said that they would not leave the school because they liked it so much.

When old Mrs Siyo left, Cassius and Caroline had talks about what was happening. In the end they decided that it was probably best for the boys to stay on at the school. But Cassius still feels that his children are missing out on things which he experienced and loved.

3.1 School — shaper of citizens and society

Human society prepares children to enter fully into the adult world through the process of education. Each society does this in a different way. For example, the education system can get children to consider the values of equity and fairness to others, to examine issues such as religious values, political corruption, race prejudice etc, where this might involve a measure of social reconstruction in the wider society. Another example would be South Africa, where the ruling elite decided on the value of social adaptation to a society in which the elite held control over all aspects of the life of ordinary people. Bantu education was designed to keep African people out of, for example, professional life, and this policy was understandably rejected. In order to build a new society, the new curriculum will orient itself to social reconstruction. What makes this task difficult is that we also need to take account of the technical, economic and human resource needs of the country at the same time. Regarding school as the shaper of citizens and society is an extraordinary challenge at a time when the structures of apartheid have been removed, and we have to design new structures.

3.2 The shock of school

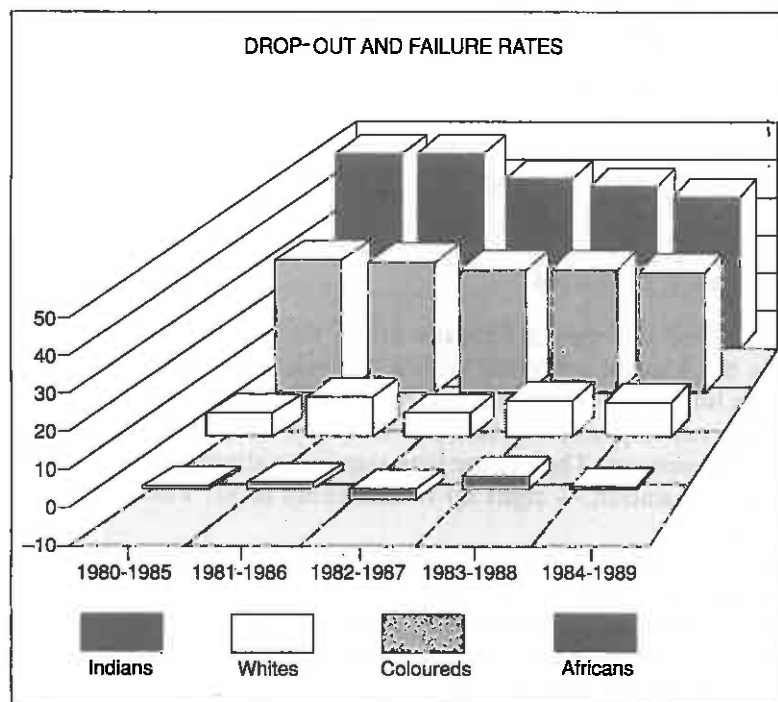
In industrialized societies all over the world, there are some children who are ready for the kind of schooling which they will experience. These children come from homes where the parents have had formal education and read for information and enjoyment. Their pre-school environment prepares them for the education process. Their home language is usually the language which they will use for education — right up to university level. These children adapt easily to school.

For other children, however, school comes as an unexpected shock. These children will look forward to school and all that it promises. They almost always experience disappointment on encountering authoritarian control in a disadvantaged environment. This is a problem in developing countries all over the world and South Africa is no exception. If we look at the educational

reasons why this is so, there seem to be two which emerge from the Threshold Project research. These findings are very similar to research conclusions in other parts of Africa and in other developing countries, for example Colombia and Peru.

The first factor is the wide gap between traditional, non-formal systems of education and formal western-type schooling. Because of this gap, children do not do well at school. They cannot make the best of a western form of education. From another perspective the school system is not sensitive to the children's needs. Whichever way we look at it the result is that the child's development is negatively affected because the way of going about tasks associated with the child's own culture is not further developed by the schooling. It is also negatively affected in that the children at school do not develop new patterns and processes of thinking as quickly as people would expect them to. These findings will be discussed in more detail later in this chapter.

When a formal education is imposed in a situation which is culturally different, the drop-out rate is a good indication of its negative effects. It indicates whether the education matches the children's needs or not. There are certainly other factors, like the lack of money, involved in these South African drop-out rates, but the figures nevertheless can be used as a broad indicator of the number of children which school does not successfully educate. Available figures do not show how many children never even start



school, although it is estimated that at least two million children are not currently at school. Statistics suggest that over the last ten years, of the African children who started school, only 77% would complete the primary phase (seven years of basic education). Of those who completed the primary phase, only 7% would make it to matric (Standard 10). Of the 7% only one third would complete the year, and only one out of every ten would gain a pass which would allow them to go to university.

It is useful to see these figures for South Africa in a larger African perspective and to recognize that the educational problems confronting us in South Africa are not simply a product of a particular political system. So, changing our political system will not **automatically** solve the educational problems. However, many of the deficiencies associated with Bantu Education will affect us for some time to come.

The second, and more important reason why schooling is not effective for the majority of children is that most children have to learn through a language other than their own.

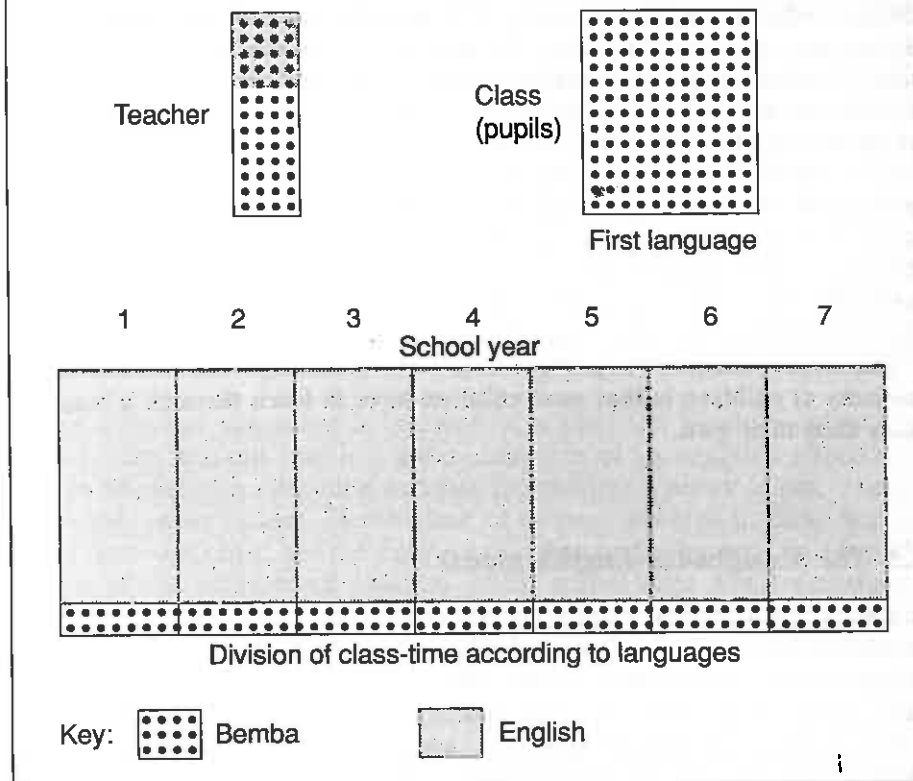
3.3 The Straight-for-English model

In some parts of Africa, English has been chosen as the medium of instruction in schools for reasons such as "political unity". Zambia chose this option at independence, so that none of the African languages of the country would have an advantage over any of the others.

The straight-for-English approach, which Zambia has chosen, is represented in the diagram. From the diagram, one can see that right from the first grade the children learn everything in English, including how to read and write. Most children enter schools without a knowledge of English. Nevertheless, these children are supposed to hear only English in the classroom. But, because they do not understand, the teacher might use, for example, Bemba, which would probably be her language too. Many Zambian teachers are not fully bilingual and feel insecure teaching in English. Yet, their own language (Bemba, in the example) is only one subject amongst others.

Research in Zambian schools has shown that the children in the third year of school cannot read at all because they have to become literate in a language (English), which is not at all related to the language which they know (Bemba). The learners, educated in English, cannot explain in Bemba what they have learned in English. This means that they do not understand what they are taught in English. They can also not express, in English, ideas which they know in Bemba. They find it difficult to understand new concepts in subjects like Arithmetic when they are taught in the new language. Even though they have supposedly had a lot of English in the classroom, children who leave school early (even at seventh grade level), cannot use their English in the outside world.

BEMBA-ENGLISH IN ZAMBIA



In urban areas such as Soweto (and even in many rural areas), parents favour the increased use of English in the schools. They want their children to have more English and to start learning it earlier. Those who are involved in the creation of a new system of education, should not take this attitude lightly. The failure of the straight-for-English programme in Zambia and elsewhere in Africa (for example, Gambia, Liberia and Sierra Leone) suggests that at least some modifications are necessary. Children who come from homes where books and reading are not a part of life are more successful at learning English if they have first become literate in their own language. So, if a modified form of the straight-for-English method is tried in South Africa, the children's early literate experiences should be in the language they know best. Informal evidence suggests that a year on a programme such as **Breakthrough to Literacy** (in Xhosa, Zulu etc.) could bring children to a state of readiness for starting English literacy. This has been the experience of the Moltano Project¹ which has developed **Breakthrough** in nine African languages.

The introduction to English as a medium would have to be carefully managed. Many African children, even in urban environments, may have had

little or no experience of English before coming to school. If this is the case, the curriculum should be structured in such a way as to help the learners achieve a sufficient level of fluency, confidence and vocabulary to enable them to cope when they are presented with more demanding and abstract school subjects in the medium of English.

Schools that adopt a modified straight-for-English teaching programme would be schools with competent principals and teachers trained and confident enough to teach in English. The reason why modified straight-for-English schools would need to be good on every level is because the learners will need as much support as possible from the teaching staff.

3.4 Re-evaluating the first language issue

The question naturally arises, "How can all children get off to a good start at school?" The answer we would like to suggest is a delicate one in the South African context: "By starting them off in their own language because it will give them the foundation on which their thinking skills and their ability to acquire and use other languages will develop." For most South Africans, however, the very idea of first language education has negative associations because it has in the past been misused as a political weapon. Hence this recommendation must be examined carefully and critically.

It may help us to see "the mother-tongue issue" in a different light if we look at some of the statistics from the rest of Africa. Most countries in Africa have an educational system very like the one in South Africa. In other words, children start off in their own language and then switch after a few years to a second language as the medium of instruction. But many of these countries are beginning to look again at the value of the children's first language in education. There has been a swing towards including national languages in schools. UNESCO (United Nations Educational, Science, Cultural Council) figures for 1990 show that 37 out of 47 African countries are committed to using one or more of their national languages in the curriculum and four others have embarked on a study phase prior to adopting this policy. So 41 states out of 47 have given, or are about to give, full teaching status to national languages in their educational systems, although in 1976, a mere 14 years ago, the figure was less than 16 out of 47.

If countries north of South Africa are moving towards using their own languages in the curriculum, why has mother tongue schooling been such a terrible failure here? The answers are familiar.

Bantu education, introduced in 1953 by Verwoerd, was a deliberate attempt at keeping Africans subordinate in relation to other South Africans. The state insisted on the mother tongue (first language) policy and the African community was forced to accept it, and they did so under protest. Rejection of teaching in the mother tongue must be seen in its context. It was regarded

as inferior because of its association with Bantu Education. People believed that learning in their own language was something created to maintain inferiority. Although the state insisted that children learn in their first language, very little money went into developing suitable language courses, textbooks, dictionaries and written literature. For example, most language courses were simply derived from missionary grammars for second language learners. So, if people felt that mother tongue education was inferior, they had good reason to do so.

In the past, African children were locked into an education without prospects. Poor first language programmes gave way to poor teaching of the two official languages. And so, school-leavers were at an added disadvantage when they tried to find jobs in the world of work because they couldn't speak English or Afrikaans well. Africans felt, most strongly, and rightly so, that Bantu education did not prepare the children properly for entrance to the economic world. It should not be a surprise that an educationally sound idea like first language education would sink with all the negative baggage of apartheid attached to it. Mother tongue education only succeeds when the community acknowledges its own language and gives it the status to enable it to grow in use — for example, in newspapers and in literature.

It is important, especially in the South African context, to understand that teaching children to read and write in their own language first should not automatically be seen as a dead-end. Language specialists believe that once reading and writing skills have become familiar in the first language, it is easier to apply them in another language. Indeed, **learning to read and write in one's own language first seems to be the best possible way to allow the children's learning and language learning abilities to develop and flourish.**

Nevertheless, many Africans still feel very negative about their children learning in their own language. They ask, "Why should our children learn in their first language? Why should they not just learn in English all the way?" They should understand that they may be placing their children at a further disadvantage in relation to the English and Afrikaans-speaking children who are fortunate enough to be learning in their first language, from Grade 1, through to university or technikon.

3.5 The importance of the first language in education

If one sees the children at the centre of the debate, one can rephrase the questions in the paragraph above: "Are there benefits for the children if they start their learning in their first language?" The answer is: "Yes, there are." **A thorough first language course gets children off to a good start in education because the language provides a bridge between the child's home and the demands of the new environment of the school.**

In their own language, children at school can say what they think if they are allowed to speak the language they know. If children can use their own

language, they can express their own ideas; they can be creative. But, if children have to learn in a new language, they are put into a kind of prison. They cannot tell the teacher what they think because they do not have the words to say it. Put them into this situation and you limit their creativity and put a ceiling on what they can do.

This also means that the children's first language must continue to be well taught even when it is no longer the classroom language. It is ineffective, for example, to use an outstanding learning-to-read-and-write (literacy) programme like **Breakthrough**, if the children cannot continue to read and write with increasing confidence in their own language. This ideal obviously requires that funds be channelled into developing language courses, readers and books. The development of the African languages is necessary if these languages are to function well in themselves **and** provide a basis for learning, including the learning of other languages. To date, only one publishing house has started developing an adequate junior primary mother tongue course in Tswana.

3.6 The first language and thinking skills

Children's thinking develops most quickly and easily in their first language. The Threshold Project research results support this view. In the southern African situation where both teachers and children are having to work in an unfamiliar language, the limits to the natural development of thinking and creative skills are greatly increased: first by the teacher's lack of confidence and secondly by the children's limited knowledge of the language. On the other hand, when children use their first language in the classroom, especially in the early years, they can talk about their interests, their needs and their thoughts. This stimulation towards mental growth is necessary as preparation for their education and lifeskills. With this mental development, the children are equipped to deal with the wealth of information they are to meet later. Without this necessary mental growth, the pupils fail to meet the intellectual demands of school, and thus fail year after year in school until, defeated and disillusioned, they drop out and become part of the "lost" generation.

Once they are well equipped mentally in their first language, children can transfer their skills and knowledge to a second language with reasonable ease. Success in a second language programme seems to be dependent on success in the children's first language. The Molteno Project, for example, went into developing a first-language Grade 1 programme (**Breakthrough**) as the first step in tackling African children's poor English results.

The table that you see over the page is one model of thinking skills which can be applied, for example, in Science teaching, although it can apply to other subjects as well. This table is intended to give readers some idea of what we mean when we talk about language and thinking skills, as the pupils' behaviour almost always requires some form of language or graphic skill.

Level of thinking	Thinking skills named	Pupils' behaviour
Knowledge Retention of concepts	Recalling	Observe, match, repeat, memorize, label, name, recall, cluster, recount, sort, record, define
Comprehension Understanding concepts	Explaining, comparing	Recognise, report, find, express, identify, explain, restate, review, paraphrase, tell, describe, summarize
Application Using concepts	Applying concepts and skills	Select, show, demonstrate, use, apply, sequence, dramatize, organize, illustrate, test out, solve, imagine
Analysis Breaking down science concepts into smaller parts of information	Analysing	Examine, classify, compare, contrast, outline, interpret, debate, defend, question, draw conclusions, research, analyse
Synthesis Putting information together to form a new concept	Synthesizing	Propose, construct, plan, emulate, compose, speculate, create, design, invent
Evaluation Judging the value of a science concept	Verifying	Judge, decide, rank, persuade, evaluate, assess, criticize, value, predict, justify, verify, convince

A model of thinking skills for Science teaching

3.7 How the second language builds on the first

If we want to argue that children should first become literate in their mother tongue, and then go on to learning a new language, we must have good reasons for saying this. Here we attempt to show how this works.

Pre-school Tswana children (for example) can use Tswana to ask for things, to make comments, to explain, to request something, etc. These functions appear very early in children's lives and are a part of becoming members of their particular society or smaller social group like the family. Once these

children begin to learn English, they know that those same things (speech acts) can be done in English. The fact that these speech acts are expressed very differently in English is the challenging part. For example, when asking for things politely in Tswana, children use a special tense, but when they do the same thing in English, they need to use words like "may" and "can" at the beginning of the sentence. Another difference they will have to learn is that when they ask questions in English, the question words ("who", "what", etc.) always appear at the beginning of the sentence. This is something new, since question words generally appear at the end of the sentence in Tswana. These differences appear since English and Tswana are not related to each other. However, the important point here is that the same speech acts can be carried out in both languages, and children automatically know this.

The next question to be asked is "What happens when the children learn to read and write?" Let us take Tswana children again. They will learn the Tswana alphabet (which is very similar to English) and how to read and write words written in Roman script. Roman script is used because the African languages were first written down by missionaries from Europe. The spelling of the African languages is very regular and easy for the children to learn successfully. When the children start to tackle English spelling, great care has to be taken to teach them the complex spelling system that English has. (The difficulties in English spelling arise from the fact that it has been a written language for a very long time, and it has borrowed words and spelling from



In a workshop situation first and second language speakers can learn to interact.

other languages.) However, the children will have learned to form letters in writing, and will know that we write from left to right, and that we use very similar punctuation in the two languages. Also we read books from the front to the back (unlike Hebrew and Arabic people who do it the other way around).

When young children listen to stories they will learn to expect that the story starts with the introduction of a main character, who usually finds herself or himself in some sort of a problem situation that has to be tackled. There are some slight differences between what we call the "story grammar" of English and Tswana, because English stories have been written down for a long time, but the basic structure is the same. What is important is that children can listen with great pleasure to long stories in Tswana, and so gain a greater general knowledge than they would get from the very simple stories that second language learners have to begin with. English stories have to be very simple in the beginning because of the unfamiliarity of the words and the grammatical structures.

In time, children will learn that they express one idea in a paragraph, and this knowledge will automatically carry over to English writing as this writing becomes more developed. Then, when children are taught to write longer pieces of text in Tswana, they will learn the use of headings and subheadings. This too forms part of English text structure.

Later children will learn more advanced skills like making summaries. Once again knowing that only the main points need to be written down, is something that occurs both in Tswana and English.

We could give very many examples of how Tswana children can carry over literacy skills from Tswana to English. The main point that we want to bring out is that children can very easily learn to read and write in their mother tongue, and then transfer skills to the second language. It is much more difficult to start with the second language because children have to struggle with the meaning of words, and the forming of grammatical structures at the same time as learning to read and write. Reading and writing for young children is very demanding on their mental "space", and so it is very difficult to combine this with learning a second language at the same time. Doing this is a slow process and children will experience few feelings of success; learning to read and write in the mother tongue will bring a great feeling of success, and encourage children to continue in school.

3.8 Bilingual schooling for all South Africans

No-one would want to limit children to a single language, especially in a country like South Africa, which has a history of bilingualism. Most South Africans are committed to the idea of speaking more than one language. What is needed now is a choice from the best kinds of bilingual schooling. In addition, for a bilingual schooling system to be successful, it will need the

approval and active support of the broader community. When these choices are made, it is worth remembering this: **a successful bilingual system needs to be manageable for pupils and teachers alike.**

For African parents the importance of being bilingual is obvious, but "white" parents have given it little thought, especially in terms of learning an African language. "Whites" have almost always assumed that all the other people in this country had to learn English or Afrikaans, as indeed they are the current official languages. But very few "whites" thought it important to spend time learning an African language.

By the year 2000, nine out of ten South African school children will not be mother tongue speakers of English. Less than one in ten children will have the "white" South African background which nowadays is still taken as the norm. Figures such as these should surely be interpreted by the "white" community as a signal that they should enter the wider linguistic heritage of the country. "White" South African parents should ensure that schools offer their children a good second language programme in one of the African languages taught by competent first language teachers.

Research shows that parents are much more committed to their children's schooling if they have a say in the kind of schooling it is going to be. It would



In order to join certain parts of the economic sector, it is necessary to be able to read and write.



Much business goes on without the use of English or Afrikaans, but a knowledge of how money works is essential. This business sector is likely to grow very quickly in the years to come.

be ideal, then, if a new education system were to allow communities to make up their minds about the schooling they want for their children. Parents could then choose from different kinds of school: for example, their children could go to schools which have a predominantly English environment, and are largely drawn into that culture; the children could go to schools where they maintain their own language as the medium of instruction, but also learn a second language; or they could have schooling which actively promotes their own language while teaching them a second language well enough to make it useful for the market place. There will be choices of another kind, if educational planning is effective; for example, between schools which specialize in the arts, the scientific and technical fields, commerce and a more traditional academic approach.

If we accept that education is the way in which children are given the skills to become members of society, it is important to think about issues such as,

- ▲ What is the starting point for a Xhosa (or Afrikaans or Pedi) child?
- ▲ How can we make it easier for children to move from their own cultural background into the larger society?

- ▲ What must children know and be able to do to cope with the larger society?
- ▲ Are we going to change aspects of the larger society to suit ourselves, and how will this affect our education system?
- ▲ Knowing that our children come from different backgrounds, how can we make sure that their education will give them all the best possible start in life?

At present, we tend to think of educational equality in very simple terms. We want all the children to learn the same things and have the same physical resources. Questions like the ones above may give us a more insightful conception of *educational equality* in terms of learning. Here we must distinguish between educational opportunities and educational outcomes. If we were simply to provide equal educational opportunities, children using English as the medium of instruction (where English is not their mother tongue) will be at a disadvantage because of their very heavy language learning load. Special provision must be made in order that they can achieve as well as mother tongue speakers of English do. In order to achieve *equality of educational outcome*, redressing historical imbalances by special provision of materials and method will be high on the educational agenda.

Worksheet 4 is on p 81. The Answer-sheet is on p 87.





Mary is a six-year-old at a school in Cape Town. At the age of two, she had twenty or thirty books that she had looked at often. Her father, Mark, would put her on his lap and they would look at the pictures of cows and sheep, pigs and hens. At first Mark would make the noises and point to the animals. Later, Mary would try and make the sounds the animals made when her dad pointed to the pictures.

At three, Mary would go to the library often with her mother. Her mum would help her choose some new books to take home. Mary never went to bed without a story. By the time she started school, she had enjoyed looking at hundreds of books.

It did not take her a long time to learn to read.

Mandisa is Mary's very best friend at primary school. Her first book was a reader handed out to her when she started school. She was very pleased with her book, but it took her a little while to distinguish which was the front and which was the back of the book.

Because Mandisa is at an 'open' school, her first reader was in English. Although she is starting to understand quite a lot of what is happening in the classroom, she finds reading very difficult. She listens carefully to the others and then copies what they say. If the teacher stops her at a particular word, she becomes embarrassed because she does not yet know the shapes of the words. Mandisa does not have a Xhosa reader.

She does not know that it would be easier to learn to read in Xhosa.

4.1 Becoming part of a literate culture

Many of the difficulties and imbalances which arise in South African education are the results of apartheid, and it will take time to correct the balance. But, important as these difficulties are, it is also necessary to look at the issue of literacy vs non-literacy rather than race when we consider educational issues.



Children learning in a room which once held a printing press . . .

Children with formally educated parents are likely to cope better in school regardless of their ethnic origins. On the other hand, children from educationally disadvantaged backgrounds will need to make major adjustments in order to be able to cope with school.

African cultures are becoming increasingly literate in the formal western educational sense. When a culture moves rapidly from an oral, non-reading, non-writing tradition to become literate, that culture will feel the strains of change. People will experience difficulties when moving into a visually literate society. It is a global tendency that once a society moves towards visual literacy, there is no going back. It becomes the responsibility of the society — mass-based organizations, the private sector, and the state — to equip all its members to cope with the demands of visual literacy. In this sense the need for literacy training for adults and children is of equal importance in South Africa.

For parents with little or no formal education, school is an unfamiliar but desirable institution, because it seems to offer the hope of a better future for their children. But for children and parents alike, the process of formal school education is not always meaningful, and so, the reasons for doing things in a particular way at school are not very clear. In addition, the schooling system does not recognize that the children have to adapt to a new environment as well as to everything else in an overloaded curriculum.

4.2 Pre-school experiences

In literate societies, parents understand the importance of reading and introduce their children to books at a very young age. Japanese children, for example, are about six weeks old when their parents start showing them books and reading to them. One-year-old children in many middle-class South African families will already know the front of the book from the back and will babble about the pictures they see when they turn the pages — in the right direction. Children who come from families with a reading culture have six years of informal knowledge about the process of reading to build on when they start to read at school. Some children merely have to “crack the code” of the relationship between sounds and letters in order to start reading quickly and make rapid progress.

In other words, preparation for formal schooling most often starts in the literate home, before the children begin school. This suggests a form of action can be taken to help children even before they get to school. Parents do not necessarily have to be literate themselves in order to help their children to become ready for school. Many children, especially in the urban areas, spend a lot of time with child-minders. It is possible to enrich this pre-school time, at home or outside of it, with activities which will prepare the children for what lies ahead at school.



This little boy is tackling a puzzle for the very first time. Pre-school experiences can help children to be more ready for school.

Children with some knowledge of books and stories are better prepared than children who have no experience of books. The latter children can be encouraged to talk and ask about the things which they see and hear. They can learn to listen and concentrate when they are told stories. They can learn to make small movements with their hands by drawing, painting or using a pair of scissors to cut out pictures. These fine hand movements are useful when the children start writing. Children with early learning experiences of this nature are very much better prepared for school. The Coke Toybox produced by the Human Sciences Research Council has made a valuable contribution towards enriching the lives of many pre-school children.

4.3 Learning to read

The task of learning to read is the biggest challenge faced by children when they enter school. People use a complex set of skills when they start to decode information that is contained in written form. When knowledge is presented in writing, it cannot be understood unless we have the skills of

- ▲ recognizing the shapes of the letters,
- ▲ pronouncing the sounds associated with the letters,
- ▲ putting the sounds together into words,
- ▲ putting the words together to form sentences and then,
- ▲ being able to grasp the meaning associated with the sentence.

The skills just described are called “bottom-up skills”. Other more advanced skills come later, when we read for meaning and use what is called a “top-down” approach. They are used at the same time when a person is competent at reading.



These Grade 1 children are using a Tswana Breakthrough course. These children rapidly learn to express their own experiences in the written word.

The worksheet on reading may have reminded you of the many things you had to learn and combine when you started to read.

Learning to read in the language you already know has the advantage that you can focus completely on the complex set of skills involved. In the early stages of reading, children concentrate only on learning how to read and the books themselves rely very much on what the children already know. One of the special features of the **Breakthrough** method is that it allows the learners to relate to their own experience in print, right from the very first day. The learners have internal worlds of ideas and beliefs, which are common to the learners' particular culture and language. It is a moment of revelation when a learner suddenly knows that there is a link between what is written and his or her own experience. Once this link has been thoroughly consolidated, reading can become a way of introducing new ideas and new ways of thinking. However, apart from giving the children the experience of being able to read and write text which they have produced for themselves, children ought to have access to as many books as possible in Sub A; perhaps as many as 50. Then their literacy skills will be firmly rooted.

4.4 Learning to read in a second language

When children have to learn to read in a second language, which they do not know very well, they cannot rely on knowing what is being said in the text. They are being asked to learn to read and to learn a new language at the same time. It is particularly difficult when the learners are dealing with a language not related to their own, because the two languages are likely to express the same ideas differently in the structure of their language. The African languages in South Africa are not related to English, although the Sotho languages are related to each other, as are the Nguni languages. So there will be no simple match between the written second language and the learners' experiences. Even if the experience is a common one, there is no language match when a Tswana girl reads a sentence like “Mother washes the clothes”. An English-speaking boy would have the same feeling of not understanding when he reads “Mme o tlhatswa diaparo”. For each of them, reading the words is complicated enough because the combinations of letters are so strange. As for the meaning, there is almost none until the learners have acquired enough skills to make sense of words in the new language.

4.5 Three stages in learning to read

It is helpful to divide the learning-to-read process into three stages, although there are no clear breaks which separate the phases. These stages help to describe the difficulties experienced by the children with whom the Threshold researchers worked.



These pre-schoolers enjoy a comic. Reading enriches children's general knowledge.

Stage 1 involves the learners in thinking about reading, a whole new system of communicating. They have to learn to recognize one arbitrary shape from another. (Do you remember confusing **b** and **d**?) They begin associating shapes with sounds, which is easy in the African languages because the

associations are regular. This task is more difficult in English. Finally, they need to be able to work out when they have made mistakes in their reading.

Stage 2 is a crucial consolidation phase. Children in this stage use reading to confirm what they already know, since they are not reading for new information. They gradually become confident about their ability to decode and predict what will happen in the story. They realize that language and stories give many clues to help readers understand fully. During Stage 2, they become quicker and more fluent in reading. They are capable of reading familiar stories using the most common words. This vital stage prepares them for the demands of the next stage by providing a great deal of practice. If children become involved in reading, and read many books in their mother tongue and English, they are much more likely to manage the next stage.

Stage 3 is marked by a new use for reading: reading-to-learn. Reading becomes a way of gaining new information. This stage involves using reading as a tool for gaining knowledge. The readers work at a more remote level as books now introduce knowledge which is beyond their actual experience. They have to deal with many more new words, concepts and grammatical structures. They also need to develop thinking skills which are related to the reading-to-learn process.

While the first two stages are necessary for the development of Stage 3, they are not enough on their own. In order to cope at Stage 3, children have to know more words and concepts, have more background knowledge (gained from home and from reading itself) and be able to start reasoning more maturely. These requirements can be achieved through lots of enjoyable reading in the lower primary phase. The children learn different ways of thinking about things such as "How do I know?" Enriching the children's knowledge and mental abilities is most easily done through the children's own language, but can also be supplemented by books in a second language.

The first two learning stages are important, but Stage 3 is critical. **If children cannot use reading as a tool for discovering new information, it has a negative effect on the rest of their education.** There is a vast difference between the everyday language which people speak and the written language of textbooks. In fact, every subject has its own special way of using "language" and as one goes further into the subject, the more important and abstract that subject-language becomes.

Here is an example from a Standard 5 General Science textbook:

We often use a measuring rod to measure length. Rulers and metre sticks are both measuring rods. A measuring rod, like a measuring stick, has a set of equally spaced marks along its length. A dressmaker's tape is also very useful for measuring length.

Unless learners are introduced deliberately and gradually to the specialized language of textbooks, they are going to find learning difficult.

The language in textbooks makes many demands on readers. They are expected to make use of a whole range of thinking skills in order to understand the writer. There are three main thinking skills required for competent reading. Firstly, fitting information present in the text into a background of previous experience. Secondly, predicting what is to come on the basis of what has already been read. Thirdly, maintaining a continuing grasp on the meaning of the text as a whole.

Most of the Standard 3 textbooks which are now being used, take too much background knowledge and language skill for granted and demand too much of the children's reading skills. (Indeed these texts provide challenges for the teachers too.) It seems likely that most children have not had enough reading experience at Stage 2 to be really ready to start reading for new information. This is not only a South African problem; in Great Britain children get textbooks at about the age of 11 and they find them difficult to use, even though they are written in their own language. The problem of children reading textbooks in their second language is more complex because one is dealing with new vocabulary and new grammar at the same time as learning new ideas, and therefore the nature of the text we give to children should be very carefully planned and designed. This will initiate children into the language of textbooks more slowly and effectively.

4.7 Writing

Writing is like speaking. The person actively produces meaning for an audience, but on paper instead of with sound. Learners are generally able to read at a higher level than they can write. In the **Breakthrough** courses, reading comes before writing, but the two processes are learned more or less together. Children are taught the mechanics of writing and the importance of writing in sentences. But no further work is done to show the learners how the larger structures — sentences and paragraphs — are put together. The teaching of writing skills must continue for a long time in primary school.

In the Primary Education Upgrading Project (Bophuthatswana), the children get very little constructive feedback on their written work, which is simply initialled by the teacher. In creative writing work this is acceptable, but it is not appropriate elsewhere, in the content subjects, for example. Children in DET schools do much less writing than the PEUP children do. It may be that the teachers do not know how to give feedback on the structure of children's texts, which would limit the range of feedback they can give the children. Feedback should in every case be handled with sensitivity to the child. Another likely contributing factor is the heavy marking load that teachers have with large classes.



Learning to write, like learning to read, is a major challenge, even in the language you know best.

4.8 Listening and speaking — important foundation skills

Listening and speaking are the basic communication skills. They are shared by all cultures because they are essential social skills. They also form the basis for acquiring the further skills of reading and writing. Reading and writing are the two skills on which the formal educational system is based. A lack of these skills renders education virtually impossible.

If we look at reading and writing in terms of the child's development from birth, we also realize that these abilities are strongly based in listening and speaking experience. Listening is the very first communication which the child

speaking experience. Listening is the very first communication which the child develops; only a while later does the child begin to speak. Children have about six years of listening and speaking in their mother tongue before they learn to read and write it.

When children go to school, they are expected to cope with more mentally demanding situations. In the lower primary school, most of the teaching that takes place depends on listening and speaking, the basic communication skills. African children in the first years of school would be more confident in these skills if they knew the classroom language.

When learners are introduced to a new language, they have to start at the beginning: even simple communication like greetings take effort. Only once the children are familiar with the language can it be used to convey mentally demanding new information. A good foundation in listening and speaking is essential if learners also have to progress to reading and writing in the language.

4.9 The Threshold English testing results

The results of the Threshold Project research show that the children's **oral skills** are generally poorly developed, because there seems to be very little opportunity in the classroom situation for children to practise basic interpersonal communicative English skills. The English they use in class is usually based on the language of the teacher or of the textbook. The reason for this has been made clear above in 2.4: the children are usually asked "what" questions based on what the teacher has just said or read.

Dictation tests which are based on **listening comprehension**, show that the Standard 3 children do not understand many of the English structures which they need for learning. They have difficulty even with listening to Grade 2 texts, and cannot make sense of somebody reading to them out of a Standard 3 textbook.

The children's **writing skills** show that they use a limited, socially oriented vocabulary and very few grammatical structures. Their English classes do not equip them with the skills necessary to write in a coherent, meaningfully organized way.

The reading tests show that Standard 3 children cannot read and understand an English text for Standard 2. In fact children were found to have difficulty with understanding important question words such as *who*, *what*, *where*, *why* and *how*. The Standard 2 English materials used in Bophuthatswana are often good enough as second-language materials, but in their present form they do not prepare children to use English as a medium of instruction. However, all the best English courses are currently being revised, and new ones are being developed.

The Threshold Project observations indicate that the Standard 3 children do not have enough contact with books for them to have mastered Stage 2 reading properly. It is essential that children have well-developed reading skills and



Listening remains a very important skill throughout school. Language programmes which are presently used do not develop listening skills sufficiently.

habits by the end of lower primary, in order to be able to cope with the demands of the higher primary.

In short, the research shows that the children's English skills are not well developed enough to cope with the demands of the present form of English as a medium of instruction in Standard 3.

4.10 The advantages of language learning in the transitional approach

In the gradual transition approach, the second language is introduced over a number of years. Children begin by intensive learning in their own language while they start learning a second language. English gradually becomes the medium of instruction. The children therefore do not have a sudden shock when changing to another language in the classroom.

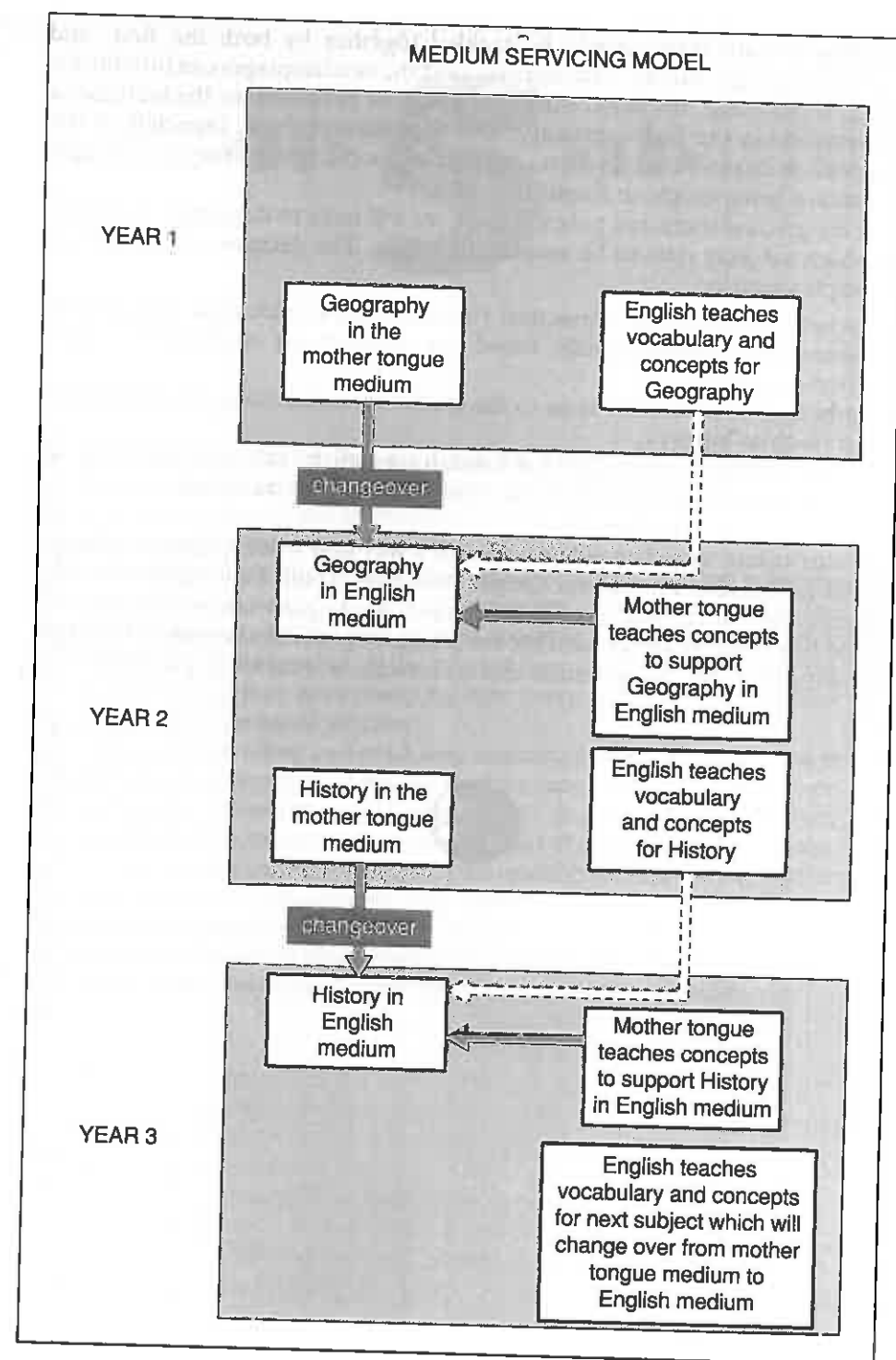
In the diagram below, a possible gradual transition is shown. In the example, the class consists of Tswana speakers and they are being introduced to English slowly. By Standard 3, this class is learning all its subjects in English, but it also has time allocated to consolidating the first language, Tswana.

Since it is easier to communicate meaningfully in the children's first language, this language offers the best opportunities for starting to develop reading, writing and thinking skills. **The children's first language needs to be very well taught.** This means that carefully planned courses in the African languages need to be developed. These language courses should develop the learners' language abilities in all four language skills. **These courses are necessary as support to the curriculum right through the primary school, and preferably right through secondary school as well.** A well-developed first language will boost children's confidence. It will provide children with a sound base for the second language as well, as has been described earlier.

Gradually increasing the use of the second language is a good idea. As the learners gain listening and speaking skills in English, they are still developing and expanding reading and writing skills in their own language. When their English is of an appropriate level to deal with reasonably demanding speaking-and-listening situations, and when their reading skills are established in the first language, then it is time to introduce reading in English.

The English course must no longer be an ordinary second language course. On the one hand, it will recognize that the language is a second language for the children. On the other hand, its aim is that the children will be able to learn content subjects meaningfully in their second language. The English course, like the first language course, must encourage the growth of all four language skills. The course will also foster skills which are needed later: it has a vital part to play in developing new thinking (process) skills.

If the gradual transition policy is used for a new curriculum, then both languages can help develop the learners' abilities. Preparation for the





Transforming the curriculum

5.1 The need for change — closing the gap between Standard 2 and Standard 3

At present, the first four years of schooling almost never prepare children for what lies ahead. **The crisis in Standard 3 has its roots in the lower primary phase**, even though that time may be reasonably pleasant and meaningful for the child. The approach to the learning of English is one of the problems; the other is that the early learning does not develop all the concepts and skills necessary for coping in the higher primary phase.

It becomes important, therefore, to see the first four years of school as the place where learners **can** learn important concepts through meaningful tasks. These concepts will then form a strong basis for the child's further development. These skills can potentially be incorporated into any language one chooses, but the central question is, "In what combination of languages can the children be **best** prepared for the intellectual challenges of the higher primary?"

The curriculum for the lower primary needs to focus on developing basic process (thinking) skills and concepts through experiential learning, that is, by doing things. When one looks at the demands made by the higher primary, it is clear that a revision of the curriculum is necessary. The present curriculum (for lower **and** higher primary) is largely a collection of facts which have to be learned. Changing the curriculum in terms of process (thinking) skills and abilities would lead to richer and more meaningful learning opportunities. The syllabus requirements need to be translated into more effective learning materials. For example, in a Standard 3 book currently being used in schools, knowing the definition of "map" and "key" doesn't help learners to use maps. Children are introduced to the definitions of "map" and "key" before being able to work with concepts they can develop for themselves. Only gradually introducing the children to the concepts underlying maps and getting to practically use them can do that.

Training in reading and writing needs special attention too as these skills form the basis for other higher level skills which children need in order to do well at school. Reading and writing are an integral part of the formal learning tradition which relies heavily on books. By the end of Standard 5, children

must be able to use books independently for finding learning information. Children from a reading culture environment do not have to make very great adjustments when they come to school. They will know about books, and usually value and enjoy them. But children from homes where there are no books have a lot of catching up to do when they come to school. One way to develop the reading habit is to develop classroom libraries, and the Threshold Project is looking into such a development. Research from similar situations indicates that children can be taught to make extensive use of classroom library books.

5.2 Language and the curriculum

The choices which South Africans make about the languages they want to use will affect the use of these languages in the classroom. The timing of the introduction of the first and second languages will have a direct impact on curriculum planning. **In the DET curriculum, the present policy means that not enough time is given to English in order to prepare the children for learning in English in Standard 3.** In other words, English is taught merely as a subject in the lower primary, which is unsatisfactory if English is to become the language of instruction in Standard 3. Up to a third of the total teaching and learning time should be devoted to the learning of English.

Different choices would lead to different language teaching approaches. For example, a modified straight-for-English option would probably mean teaching English reading and writing quite late, when the children are reasonably confident in oral skills in English. Otherwise, asking them to learn to read in English is giving them a double burden. However, reading and writing can be introduced quite early on, if it is in the children's own language. Another approach would be to use the gradual transition. This would mean that the children could be introduced to mentally-demanding materials much earlier than in the straight-for-English approach because the learners can do them in their own language first.

It should be clear that the Threshold Project believes that **good quality instruction in the children's own language is essential for the development of their self-identity, for the growth of their mental capacities as well as for learning English.**

A thorough second-language course is equally essential. The course should be flexible enough to accommodate supporting English as the medium of instruction whenever this might be introduced.

5.3 Introducing a new curriculum

A new curriculum never comes into a vacuum. It comes into an existing teaching and learning culture. The people most directly affected by a curriculum change are the teachers, and it is frequently a source of stress to

them because it can be a great upheaval in their professional lives. So, if a new curriculum is to be introduced the change has to be manageable and meaningful. Making a meaningful change is frequently a slow process because people have to recognize the need for change, before they become an agent for change themselves. It means starting a gradual process of further teacher education which must capture the imagination of the teachers themselves.

Part of a new dispensation for education in South Africa should be to raise the status of teachers, both in their own eyes, and that of the community. They should be regarded as professionals practising an art, each in their own way, and not simply instruments of an education department. In curriculum development the idea that you want a change and that the change is dependent on retraining teachers is simplistic. In-service development must be the development of the teacher as artist. That means developing their understanding which is expressed in the classroom.

5.4 Expanding the scope of the curriculum

The present curricula (used in all the various education departments) expect both too much and too little. Syllabuses, textbooks and timetables do not take into account **in real time**, for example, how long it takes for a bean plant to grow, or for the children to begin to read maps well enough to use them properly.

Before simply rehashing the old syllabuses, it might be worth looking at what we automatically assume should be taught at school. If schooling is supposed to be a preparation for life, what kind of life does a poor matric with three languages, Biblical Studies, Biology and Geography prepare you for? Schooling aimed at social reconstruction should be one of such values built into the whole new curriculum.

This does **not** mean that school should just become more efficient at preparing children for work. For many people, education has meant twelve years of schooling with academic subjects. It is supposed to prepare children to enter the workforce at least as blue-collar workers. Any form of education which prepares children for some kind of technical work has been frowned upon as inferior, as a way of keeping Africans in their place. This attitude is a hangover from the era of Bantu Education. The result is that people with technical skills are rare and in demand. It might be worth keeping in mind that a plumber can earn as much as a professor of education. There is a shift of attitude taking place — people are starting to see vocational schooling as an alternative to the academic route. We need to take note of what the economically successful countries do in their education systems: what we find is that there is a consistent stress on science and mathematics as well as the education of the majority of pupils in technical or vocational subjects.

A new curriculum, if it is to achieve sound objectives, should open up the options for children, not simply prepare them in any narrow sense for a job.



Children learn by doing things. A learner-centred curriculum will affect the timetable, the syllabus and the materials.

The curriculum should take into account day-to-day living beyond work — very few of us know what our rights are in the eyes of the law; we deal constantly with money yet have little understanding of how it works or how best to work with it; our society advertises the joys of possession but does not explore the underlying materialistic values; we use up the earth's plants, water and air and we do not think to put back as much as we take. Education, which should be a preparation for life, should find time and ways to develop values and needs such as these.

It will also be necessary to be very careful and critical of what goes into the new syllabus when the curriculum is restructured on a more skills-and-problem-solving basis. This is so for two reasons — the curriculum is already very full, so it should not be a matter of saying, "Well, we'll just add these skills and processes to the syllabus." The second reason is that teaching a process (thinking) skill is a slower process than teaching facts, but the end result is much more powerful. Having learned certain process skills, for example comparison and contrast, children are able to find out much more on their own than they would with a teacher.

5.5 Creating a South African curriculum

Children who come from a disadvantaged background may find school very bewildering if they are not offered sufficient support. We recognize that school activities are very closely related to the western, industrialized culture which created the school institution as we know it. For children who come from a different tradition, the meaning of these activities is often bewildering. For this reason, school can seem very confusing unless the teacher helps the children to find meaning in what they do.



Using balloons and syringes, these Standard 5 boys are learning about air pressure. Mentally demanding concepts are learned more easily through experience, especially if the medium of instruction is a second language.

When learners from one culture tackle problem-solving tasks set by another culture, two sets of meaning are involved. Firstly, there is the meaning built into the task from its context in the unfamiliar culture. Secondly, there is the meaning which the learners give to the task in terms of their own cultural outlook. More attention must be paid to the nature of this interaction.

The present curriculum in most South African schools is Eurocentric. It is unfortunate that it is often assumed that African traditions and arts are not appropriate in schools. Perhaps not all of them are, but then the same can be said of the Eurocentric culture. Both traditions are now a part of South African society and we should take the best from both, as an opportunity to create a stronger bond between cultures that have co-existed and yet have not learned equally about each other.

5.6 Integrating scientific and logical skills into the curriculum

The makers of a new curriculum will need to re-appraise formal knowledge and values too. Part of the present educational shortcoming is this: **the curriculum does not recognize or teach concepts and skills which are needed for formal thinking and schooling. They are taken for granted.** For example, children need to be taught to know the difference between facts and hypotheses, to be able to decide what one can reasonably assume from information given and to know when assumptions are unreasonable. For many teachers, these differences are not clear either. They too would need experience to deal with such scientific and logical skills, preferably through the materials they teach.

Scientific and logical thinking can be subdivided into smaller thinking skills which can be taught. Such reasoning skills depend on the learner being able to do the following:

- | | |
|--|---------------------------------------|
| ▲ Observing carefully and accurately | ▲ Dealing with contradictions |
| ▲ Comparing two or more things for similarities or differences | ▲ Describing clearly |
| ▲ Classifying information | ▲ Exploring alternative possibilities |
| ▲ Separating cause and effect | ▲ Making hypotheses |
| ▲ Summarizing | ▲ Inferring |
| | ▲ Predicting, etc. |

These skills are indispensable right across the curriculum. Because they are so important, they should be introduced in the early stages of learning. It would be important to teach teachers as well as learners how, where and when to use them. Teaching these skills in a suitable way will in itself already make learning more meaningful, because they will provide challenges beyond the memorization of text.

There is, however, an assumption in this argument which is taken for granted, but which needs to be recognized and assessed: "that the teaching of western, logical, scientific thinking is a good thing". It is certainly extremely useful to be able to think in this particular way, and one of the primary tasks of formal education is to equip everyone with these abilities. But it should also be remembered that western thinking is a cultural product too. Because western-style thinking has been such a powerful tool in creating technological culture — and power — it is easy to think that it is somehow superior. There is a certain danger in giving western-style thinking such status, because it tends to devalue other systems of thinking. However, apart from science, mathematics, logic, the mother tongue and English, the rest of the curriculum is there for us to negotiate in a new dispensation.

It is certainly important to restructure the curriculum so that it will encourage teachers and pupils to think logically and scientifically. It should be equally important for the curriculum to include subjects with values that highlight the shortcomings of thinking exclusively in those terms. In short,

what is really needed is a curriculum which does justice to South African cultural variety. Such a curriculum would allow schools to transform these separate strands into a new cultural reality for all South Africans.

A curriculum based on skills has another advantage. It is also a better basis for learning languages than a fact-based curriculum. Talking in a new language about things you are actually doing will help you to learn the language better. It is rather difficult to make sense of a language by just listening to strange, new facts that you know very little about. It is hard for a child to understand a description — in a second language like English — about the Eskimos, for example. People who live in igloos in a very snowy part of the world are very far removed from the child's experience, especially when there are few pictures to help understanding. The first obvious step is to enhance the quality of illustrations in textbooks. However, teaching by comparison would help in this example — the Eskimo can be compared to the Bedouin in terms of clothes, food, mode of transport, and social customs. By making this comparison, children will be freed from the dry learning of facts.

The Threshold Project argues that it is best for the children's mental skills that the concepts are developed both in the children's own language and in the second language. If this process is properly handled, it builds up the children's language abilities and develops the learning skills necessary for other subjects.



The drive for education is extremely powerful. Even under difficult conditions, teachers and pupils grapple with the tasks set by formal, western education.

5.7 The teacher-guided discovery approach for learners

It is important for South African teachers to find new **ways of doing things** in the classroom. This involves, in many cases, new **behaviour** in the classroom. The teacher's task would be to provide an appropriate environment which would create opportunities for learning and help the children to get the most out of these experiences. The teacher directs the children through a process of guided discovery and the children themselves become actively involved in learning. They play an active part in discovering the meaning of the activities. Teacher and learners speak to each other, ask and answer each other's questions. These points may sound obvious, but the classroom observations showed that very little teaching of this kind is done spontaneously or consistently in the southern African higher primary classrooms.



Children learning through discovery.

5.8 Using materials to help teachers and pupils learn a different approach

The Threshold researchers came to believe that well-designed teaching materials would help teachers to move away from the "safe" but deadening techniques which help them to survive in the classroom. The right kind of teaching materials can carry a good deal of the momentum for change, under

certain conditions. The first condition is that the teachers be trained in the use of the materials, because they will be involved with methodology and materials which are not yet familiar. Asking real questions, for example, which require children to think and respond, is an area where teachers will generally require training.

The Threshold experimental materials **did** guide the teacher into asking the right kind of questions, and the children loved to show that they knew the answers.

The second condition is that the material must not seem too complicated and strange to the teachers. They must have the confidence, once they know the materials, to go into the classroom and present them well.

The experimental materials used in the project looked very different compared to the usual textbooks which Standard 3 children use. They were designed so that the learners, even with limited knowledge of English, could show that they understood complex skills like reading maps or doing experiments.

Innovative materials such as the ones we used, which teach the necessary skills and concepts, helped both the learners and the teachers develop a different way of interacting in the classroom — children were given responsibility for doing things which would help their understanding. Everyone seemed involved, happy and better informed, though we felt the materials could have been even more finely tuned to the needs of the learners. Many teachers commented in surprise that they had not realized that their pupils knew so much.

When we tried to work out why the materials generated such involvement, two things emerged: firstly, the materials expected quite a lot of input from the children, and, secondly, the challenges were quite concrete. So, while the learners had to do things no-one had ever asked them to do before, they also had lots of information and guidance to help them through. **Before children can go directly into work which is both difficult and abstract, there needs to be an intermediate stage where abstract concepts are transformed into examples or problems which children will understand as relating to their lives.** It is inevitable that teachers will change the materials as a result of their own style, their understanding of the materials, their way of looking at the learners' needs and so on. These are the reasons why it is naive to suppose that change can simply be forced on teachers by means of introducing the right materials. Even so, the Threshold Project materials did significantly alter the nature of the teachers' interaction with the learners, in a positive direction.

The questions: "**How can school best meet the needs of children?**" and "**How can it prepare them for full participation in society?**" can be asked of education in all South African schools regardless of which department they (used to) fall under. The "way we do things" in South African schools will profit from being re-organized. Planners should recall that education should start from the learners' actual needs. Planners, teachers and parents should be clear as to what purposes education in South Africa should serve.



Kagiso, a colleague, was speaking recently about his experiences at school. The thing he hated the most about school was being beaten — for being late, for failing Maths, for not running fast enough. The nickname of his school was “Alcatraz” and the motto which the students gave it was, “No-one shall ever escape.”

At university, Kagiso did really well. In fact, he received one of the ten bursaries given to the best students on campus. He loved university, he says, because there was no punishment and because he found that he could excel at the new subjects, which included psychology and sociology.

It came as a real surprise, then, when Kagiso confessed to reading only when he had to. “I never buy a newspaper, unless I know that there is going to be information I need . . . like when they are going to cut off Atteridgeville's electricity. And then the only thing I read is the article about the electricity.” He never reads novels, “let alone a magazine”. And the idea of reading for pleasure is completely strange to him.

Schooling, he says, is just preparation for exams. Even at university, he would read a book for an assignment, do the work and forget about the book as quickly as possible. Reading was just a way of “collecting courses for my degree”.

After a workshop on reading, Kagiso said to his girlfriend, “Hey, Mary, other people read for pleasure.” When they spoke about it, they realized that they both feel uncomfortable when other people talk about something they have discovered while reading. They feel that they might be missing an important experience.



There can be very few South Africans who are not interested in what the future holds for us all. Certainly, at no time in recent history has the possibility for change been so clear as it is right now. Given such an opportunity, people together have to face the question, "How can we, in planning a future for our country, make sure that the conditions for people's growth and development are as good as we can make them?"



6.1 Language planning — shaper of the future

There are doubtless many angles from which the question can be answered, but this book has looked closely at one area, language, which seems central when making plans for the future of education in South Africa. Think again about the vital part which language plays in any society: language can open the way to education, or it can close the door to educational opportunities. It is a key to knowledge, information and communication. Language and literacy, finally, play an important part in modernizing and developing a country.

So, planning for growth and development in South Africa will need to include some serious thinking about roles which the various languages will play. A good deal has already been written about which languages should be used for what purposes in a future, democratic South Africa. Both the South African government and the ANC have working documents which deal with possible language policy.

You may well ask, "Why should I be interested in language planning? What has it got to do with me?" Language planning will decide what languages are spoken in the courts of law and in parliament. It will affect television, radio and the newspapers. Even the language of business can be affected by language-planning decisions. It could change the language of our dealings with the post office, the municipality, the police force and the health services. It could also affect what happens in education, from the nursery school through to the university.



All South Africans have the right to be literate and to choose which language they prefer to use.

The constitution of a state may spell out some form of relationship between the state and the languages of that territory. If the constitution gives the different languages different status, it sets up relationships among the languages of the country. These relationships can put one or more languages at an enormous advantage while putting the other languages at a serious disadvantage. The more democratic the relationships are between the languages in the constitution, the less likely it becomes that the speakers of a particular language will become an elite group just because they happen to

know the language favoured by the constitution. If the wording of the constitution allows for change in respect of the roles for the languages, that too will help to encourage a dynamic language situation in South Africa.

What needs to be considered when making plans for languages in a country? An obvious area to begin is to look at the number of people who speak the various languages.

Most people in our country speak an African language as a home language. Less than 10% of South Africans speak English, the one official language, as their first language, while about 16% speak Afrikaans as their first language. So, at present, three quarters of the population use neither of the current official languages as a first language. These figures do not reflect that about half the African people in this country have acquired either English or Afrikaans as a second language. Nor do they show how very few "white" people speak an African language.

For language planning, it is equally important for planners to know which languages people want to speak as well as which languages they already do speak. This information reveals how big (or small) the gap is between what exists and what the people would ideally like to be able to do.

The choices which are made in language planning reflect the kind of society which the planners would like to see. The choices will structure the kind of relationships between the different language groups. The language choices made at state level will also shape the relationships which are set up with other countries. If, for example, South Africa chooses English as its language of wider communication it aligns itself with the English-speaking world, the United States of America, Great Britain and the Commonwealth countries. Choosing English immediately sets up a network with some parts of the world but it also immediately limits the potential of contact with other parts of the world.

Language planning should start before a constitution sets up the structures which deal with language. But, once the constitution is established, the work of language planning goes on to convert ideas into plans of action. The planning would probably involve for example, funding dictionary projects to create technical vocabularies, having road signs painted in different languages, translating governmental and administrative forms, and planning a new education system, and the role of language in this system.

6.2 Language policy and education

Reforms in education are always very closely connected with issues such as nationality, religious ideals, race and language. So, a major challenge, if not the most important challenge, facing a democratic government is to create a flexible educational system that caters for a variety of needs and wishes. The setting up of an educational policy should concern all communities not just a small core of professionals.



Despite their disadvantaged education, these children show an intrinsic drive for cooperation and communication.

The situation in South Africa is complicated by its different languages and its mix of literate, semi-literate and illiterate people. These factors are not unique to this country, but the situation has been further complicated by our political history which has fragmented education and created a legacy of inequalities.

A basic principle that needs to be respected when an education policy is made is this: parents have the right to choose for their children from educational options. **The parents have the right to know what the options are, and what these options imply, when they choose the kind of education which their children will have.** They also need to know that, whatever they choose, all the children will receive adequate funding, adequate quality of attention and opportunity even as the schooling caters for a particular set of needs. And yet, simply to give every child the same kind of classrooms, teachers, textbooks and course of study is not enough to ensure equality. If a language policy ends up favouring one language over the others, then children who do not speak that language at home will be at a disadvantage unless people make a special effort to teach and learn the language which is favoured by the policy. We must expect all children entering the secondary phase to be equally equipped to meet the challenges of the new phase.

6.3 The Threshold Project's guidelines for language policy

The Threshold Project research suggests that the following principles should be seriously considered when a language policy which will influence education is formulated:

- ▲ Language policy needs to make its societal goals wider, in other words it should aim to develop bilingual (or multilingual) speakers who see this as an important part of being South African. Successful language policies intend to bring people closer together.
- ▲ Language policy would remain an on-going process, so that decisions can be re-negotiated periodically as needs gradually change. The resulting change in the educational system should then remain appropriate.
- ▲ Language policy should have to make sure that parents **know** that there are educational choices open to their children. South African parents are not used to the idea of having choices in education, and so policy will have to foster their learning to be involved in making educational choices.
- ▲ Language policy should support the parents' right to ask that their children be educated in their own language, at all levels of education. It should also support their being educated in another language medium if the parents so choose.
- ▲ Children should all be given the opportunity to learn English, the language of economic dominance, so that they may become effectively integrated into a multilingual, urban and industrialized society, if they wish to do so. All children should be given the opportunity to learn at least one of the regional languages. For "white" children, to learn an African language should become policy.
- ▲ Language policy needs to be as fair as possible to all the languages. This would need to be shown by supporting the development of indigenous languages so that they can more easily be used as teaching languages.

The issue of languages in this country often appears to be very problematic to South Africans. We created this problem ourselves. It is therefore up to us in the area of education at least, to build an educational language policy which in the final event, works equally to the advantage of all South African pupils.



WORKSHEET SECTION



My language profile

***Fill in the following statements — they will help you to think about your language history.**

1. The first language I ever learned was
2. My mother's language is/was
3. My father's language is/was
4. The main language I speak at home is
5. The main language I speak at work is
6. My favourite language is
7. A language I do not like is
8. I would like to know the language really well.
9. I know these languages:

Look at the example and use this scale:

W — Well R — Reasonably well P — Poorly C — Cannot

	LANGUAGE	UNDERSTAND	SPEAK	READ	WRITE
1	TSWANA	W	R	P	C
2					
3					
4					
5					

In the example, the person can understand Tswana quite well and speaks the language reasonably. The person is poor at reading Tswana and cannot write the language.

10. If you have one or more children: At home, my child speaks
11. If you have one or more children: At school, my child speaks
12. The language/languages I want my children to learn at school is/are

***Answer-sheet 1 (p 84) will help if you are discussing your history with other people.**



The school situation

***Complete the following statements first. Then answer the questions.**

1. My child's first language is
2. The classroom language in my child's class (medium of instruction) is

A. The school situation

1. Can you choose the kind of school which your children go to?
2. Do you like the school and its principal? Is the atmosphere in the school good for learning?
3. Do you feel that the principal and staff would be helpful if you wanted to talk about your child's problems?

B. The teachers

1. Do you think that the teachers are working under suitable conditions? Do you believe the teachers are doing their best for your children?
2. Is the teacher fluent in one or more African languages? In English, the language of wider communication? In Afrikaans? In any other languages as well?
3. Does the teacher teach the content subjects (e.g. science, history) in an interesting way?
4. Do the teachers allow the children lots of opportunity to express themselves?
5. Did the teacher receive good teacher training?

C. Books and other materials

1. When you look at your children's textbooks, do you think that the information and the drawings will be at just the right level for them to manage?

2. Do your children have bilingual dictionaries?
3. Are there suitable books in both languages for the children to read?

D. The children

1. Are the children usually positive about going to school? Are they happy and confident in the classroom?
2. Are the children keen to learn new things? Do they do well in their tests and tasks? Can they get on with work without always needing the teacher's help?
3. Can they choose what language they want to answer in? (Is there a chance they will be laughed at if they choose to answer in a particular language?)

E. Language teaching

***Answer these questions for your child's own language and (if necessary) for the medium of instruction.**

1. Do the teachers believe that the language is important? Do they teach the language with commitment and well?
2. Are the reading-books and language-books interesting, challenging and attractive?
3. Does the teacher tell the children stories and read to them?
4. Can children find other suitable books either in the classroom or library? Do they enjoy reading?
5. Are the textbooks for science, history, geography, etc. in the children's own language?

***Answer-sheet 2 (p 85) will help you to discuss these issues further.**



The language of real life

***Answer the following questions on your own. Discuss them afterwards using answer-sheet 3 to encourage you.**

1. When you get into a taxi or a bus, what language do you use to talk to the driver and the passengers?
2. When you are watching a soccer match, what language do you use to cheer the players?
3. In church, what language does the minister use? What language do you use when you sing the hymns? What language do you use when speaking to other church members?
4. If you attend a social meeting which has a purpose, for example a stokvel, a burial society, a book club or a choir practice, what language do you speak?
5. You are in a bar, shebeen or tavern with friends. What language do you mostly speak?
6. If you are studying at a school or college, what language(s) do the teachers use? What language(s) do you use?
7. If you have children at school, what language(s) do they speak in the classroom? What language(s) do they use in the playground?
8. What language would you use when you talk to a salesperson in a big furniture store? If you were buying a double bed on hire purchase (HP), what language would you use to complete the forms? If you asked, would the salesperson help by translating the information for you?
9. You are caught in a speed trap. What language do you speak to the officer while he writes out your ticket?
10. If you had to appear in court, what language would you speak when you gave evidence? What language would the lawyers and the magistrate speak?

11. When you are entertaining friends at home, what language do you speak?
12. When you read a newspaper, what language is your paper written in? When you choose a magazine, what language is the magazine written in?
13. If you listen to the news on the radio, or watch it on television, what language do you choose to hear the news in?
14. If you ever use an automatic teller machine at the building society or bank, what language are the instructions in? When a teller behind the counter helps you, what language do the two of you speak?
15. When you buy groceries, what language do you speak to the person at the till? If you have a complaint and speak to a supervisor in the shop, what language do you use?
16. If you fill in a job application form, what language do you use? When you go for the interview, what language do you and the interviewers use?
17. If you study at university, what language will you find in the study manuals? What language would your lectures be in?
18. When you go to a political meeting, a civic meeting or a trade union meeting, what language will be used in the meeting? What language do you speak in the meeting? Do you sometimes not speak because you feel your language is not good enough?

*Answer-sheet 3 (p 86) will help you to think and talk about the "language of everyday life".



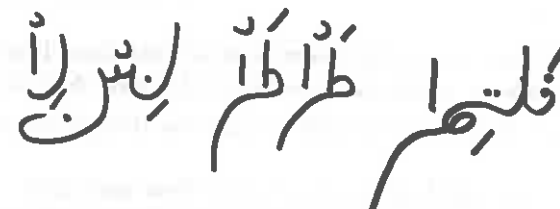
Remembering about reading

*Answer the following questions. They will remind you of some of the things you learned when you started to read.

1. Can you recognize the letters in this piece of writing? Can you read it aloud, even if you do not understand what it means?

DIPERKATIKAN SELAMA SEABAD.

What about this one?



2. Are these all the same letter? How do you know?



3. What is wrong with these sentences?
Whenwespeakwehearsoundsthatrunintoeachotherlikethis.
Butwedonotwritelikethis.
4. What is wrong with these sentences?
.thgir ot tfel morf etirw syawla ew ,hsilgnE nI
.od segaungal lla toN
5. This is a well-formed English sentence. Why, then, is it so difficult to understand?
Every observed system has an associated wave function.

9. Is there anything a little odd about the numbering on this page?
8. After reading and answering all these questions, think up a definition of reading.
7. Read the following passage of nonsense English and then answer the questions.

Some socklings were mipping cleds into a bild. Unstrengly, the bild had a wantle in it and-caddled into twerds, pumperdinking all the socklings. Wantled bilds often caddle.

- (a) Who were mipping cleds into a bild?
- (b) What happened while the socklings were mipping cleds?
- (c) Why did the bild caddle?
- (d) What happened to the socklings when the bild caddled?

Can you answer these questions even though you do not really understand the passage? Why is it possible to answer the questions?

6. There is a spelling mistake in the following passage. Decide what the word should be.

The number of students in the experiment was seventy-fine. Thirty-eight were Nguni-language speakers, while the remainder (37) were Sotho speakers.

How did you decide what word should replace the misspelled word?

***Answer-sheet 4 (p 87) will help you to answer these questions.**

ANSWER-SHEET SECTION





Looking at the language profile

***Try to answer the question, “What language is my most important language?”**

***Try to answer the question, “When is another language important?”**

1. Can you still speak your first language? Do you read and write in this language?
- 2/3. Can you speak your mother’s language? If you cannot speak it, what has happened that you do not speak it? What about your father’s language?
4. Why is this particular language your home language? What other language could be a home language for your family?
5. Why is this particular language your main language at work? What language do you speak to your boss? With your colleagues? If you supervise people, what language do you use? And, if you address a whole group of people at work, what language do you use?
6. Why is this language your favourite language? What makes you like it so much? Do you know this language well? If this language is **not** your home language, why did you choose it instead of your home language?
7. Why do you not like this language? Can you think of any good reasons for being **positive** about this language?
8. Why is this the language you would like to know really well?
9. Which language do you know best? Least? Which language is your most useful language? Are these languages associated with particular activities and/or people?
- 10/11. Do your children speak their own language well? How are they managing the new languages at school?



The school situation

The questions in Worksheet 2 were developed from work done on educational planning for Namibia. The research aimed to find the factors which predicted a successful bilingual programme. Questions such as these were used to assess “the degree of success” for example of bilingual programmes all over the world.

It is important for people involved in schools—principals, teachers, parents and even pupils in the senior schools—to be able to ask the right questions about schools so that they can be improved. These questions look at some of the broad issues, not all of them. Nevertheless, they are a useful starting point for thinking about the school situation.

Nearly all the questions expect the answer “yes”. A good educational system is likely to have a majority of “yes” answers, while a poor system will have many “no” answers.

Issues that arise from the worksheet are:

- ▲ Do parents have a choice of schooling?
- ▲ Is there a “culture of learning” in the school (and society)?
- ▲ What are the teachers like?
- ▲ Are there suitable learning materials in the classroom?
- ▲ Are children happy and fulfilled at school?
- ▲ Are the first and second languages well taught?

Knowing what questions to ask is important. It is the first step to finding out the answers. If you are discussing these issues in a group, there may be many more questions which you want to ask about the education system.

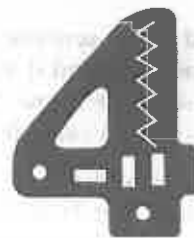
The research found that high levels of success are associated with positive goals for the society and the languages. Successful bilingual programmes are also associated with success in other areas of learning.



Looking at the language of real life

The following questions may help you to think about your answers.

- ▲ How many times was your first language the answer? Did that surprise you? With what kinds of activities do you associate your first language?
- ▲ How many times was English, the language of the business world, the answer? Which areas of life are associated with English? Are these areas of life which you enjoy and feel relaxed about? Or are some of these uses of English difficult for you? In what areas of your life does English not play a part?
- ▲ How many times did you give English as the answer? How do you feel about using Afrikaans? Do you like using it and feel relaxed about it? Do you perhaps feel negative about Afrikaans and try not to use it if possible?
- ▲ How many times was your answer an African language? If this language is your second or third language, what situations are associated with this language? Do you feel comfortable speaking this language?
- ▲ Are there situations where you would prefer to speak another language? Are there situations where you would prefer to read another language, e.g. in a newspaper or magazine? Would you prefer to study in another language?
- ▲ What language(s) do you associate with ceremonies? With religion? With shopping? With doing business? With school? With college or university? With work? With family? With friends? With entertainment? With the police? With the government? With political activity? Can any of these associations change? What will cause them to change?



Remembering about reading

The comments below will not always be answers. There will sometimes be more questions for you to think about.

1. South African readers are familiar with the Roman alphabet (that is, the **abc**), so we will be able to read the first phrase aloud even if we do not know what it means. Comparatively few South Africans can read Arabic, a language which is written from right to left. It is difficult to know where one letter begins and another one ends. It is impossible to know what sounds are represented, unless you know the Arabic alphabet.
2. Most people would agree that these are all the letter "A". But some of these A's seem quite far away from the "typical" A. Which A do you think is the most typical? Why do you think that this one is the typical A? Which A makes you feel that you have to use your imagination? In what way is this A unusual?
3. "When we speak, we hear sounds that run into each other like this. But we do not write like this." One of the skills we have to learn so that we can read is to recognize where one word ends and the next one begins. Next time you hear someone speaking a language which you do not know, see if you can recognize the words separately. Can you? Or can you only hear a series of sounds?
4. "In English, we always write from left to right. Not all languages do." This point has already been made, but it makes it very real to see a language you know written according to a different convention. One of the things about learning to read is that the learner has to understand and agree to follow the choices which a particular writing system has made.
5. It is amazing that such a short sentence is so difficult to understand. The grammar is not difficult. Some of the words are not the words of casual speech, but they are not highly unusual words either. Why, then, is this

sentence not easy to understand? The idea expressed in the sentence is very abstract. People who are not familiar with physics will find it very difficult to understand these words, but to scientists who know the scientific ideas around this statement, this sentence will seem very clear.

6. The spelling mistake, “**seventy-fine**”, could be either “seventy-five” or “seventy-nine”. If you do a little adding, it becomes clear that $38 + 37 = 75$. Using other information in the paragraph, you can go back and **know** what the writer meant, even if that was not what was written on the page.
7.
 - (a) The socklings were mipping cleds into a bild.
 - (b) The bild caddled into twerds.
 - (c) The bild caddled because it had a wantle in it, and wantled bilds often caddle.
 - (d) The socklings were pumperdinked when the bild caddled.

The chances are that you will have got 4 out of 4 for the comprehension test, even though you don't really know what **socklings**, **bilds** and **twerds** are. Nor do you know what the verbs — to **mip**, to **caddle** and to **pumperdink** — mean.

Have you ever had to answer comprehension questions in a language you hardly know? Many children learn to guess in just the way you have done; the teacher thinks, “Good, they understand.” But, the truth is, they have learned a few routines which help them through without having to understand anything.

8. The following features are important: Reading is a way of transmitting a meaningful message from one person to another without using sound, that is, without having to speak. Reading makes use of shapes to represent sounds and words, which are put together to make even bigger units — words, sentences or even whole books. One also needs to know the conventions of the writing system, e.g. from left to right across the page and top to bottom. Reading also means that you need to be able to recognize when a mistake has crept into the message.

Are there other important aspects of reading that are not mentioned?

9. The numbering of the questions on the page defy the usual top-to-bottom order. Instead the page is organized from bottom to top.