This paper outlines an Australian bilingual education program for aboriginal children, and describes the role of linguists in such programs. The program consists of four stages, roughly coinciding with the first four elementary grades. During the first stage, the child becomes literate in the vernacular, is exposed to beginning content material, and learns to speak English through oral lessons. At the second stage, reading skills in the vernacular are developed, and the child begins to read and write English. In the third and fourth stages, the child learns in both languages and is ultimately instructed in English with some classes in the vernacular. The linguist has several roles in such a program. There is a need for a survey to determine how many vernaculars are spoken by the children, which should be taught, and which is the central dialect in an area where several dialects are spoken. Linguistic descriptions of the aboriginal vernaculars are needed as well as an assessment of a child's language competence in the vernacular and English at the outset of the program. Linguists are needed for the accurate preparation of educational materials. The advantages of training aborigines as linguists and literacy workers are also discussed. (CLK)
"Bilingual education does not equal vernacular education. It is education in two languages." This statement was made by Dr. Sarah Gudschinsky during a Vernacular Materials Workshop held in March/April, 1973 at the Summer Institute of Linguistics in Darwin. Prior to this, the Prime Minister of Australia had announced that bilingual education programmes are to be set up in communities where Aboriginal children are still speaking their own languages.

The purpose of this paper is to outline a bilingual education programme similar to those being used successfully in Peru, Vietnam, and elsewhere, and to point out the vital role of the linguist in the implementation of such a programme. This programme is recommended by Dr. Sarah Gudschinsky, International Literacy Co-ordinator of the Summer Institute of Linguistics, who has had more than twenty years of experience in vernacular and bilingual education programmes in countries throughout the world, e.g. Latin America, Nigeria, India, and South Vietnam. This paper is written in the context of the current situation of the Australian Aborigines.

The accompanying chart gives a brief outline of the salient features of the four stages of the programme. The pre-school years are not included in this outline, in which Stage One is the child's first year in primary school. The first three stages cover roughly
BILINGUAL EDUCATION PROGRAMME

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<thead>
<tr>
<th>STAGE ONE</th>
<th>VERNACULAR</th>
<th>ENGLISH</th>
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<tbody>
<tr>
<td>Grade 1</td>
<td>Child becomes literate in the vernacular.</td>
<td>Child learns to speak English through oral English lessons.</td>
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<td>Child receives the beginning content material such as health, hygiene, ethics, citizenship, science, nature study, orally in the vernacular.</td>
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<tr>
<th>STAGE TWO</th>
<th>VERNACULAR</th>
<th>ENGLISH</th>
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<tbody>
<tr>
<td>Grade 2</td>
<td>Child is given maximum opportunity to use his reading skill.</td>
<td>Child continues to learn English orally.</td>
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<td>Child is introduced to a wide choice of content material.</td>
<td>Child learns to read and write in English.</td>
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<tr>
<th>STAGE THREE</th>
<th>VERNACULAR</th>
<th>ENGLISH</th>
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<tr>
<td>Grade 3</td>
<td>Child learns extensively in both languages, building and developing a bilingualism which gives him access to a large amount of material in either language.</td>
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<tr>
<th>STAGE FOUR</th>
<th>VERNACULAR</th>
<th>ENGLISH</th>
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<tr>
<td>Grade 4 plus</td>
<td>Child learns extensively in both languages but, ultimately, is instructed in English with some classes continuing in the vernacular.</td>
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* More than one school year might be necessary for children who are very immature, or who have not had pre-school preparation.
the first three years of primary schooling, and the fourth begins in
the fourth year and continues throughout the child's education.

In Stage One, the child learns to read and write in his mother
tongue. All content material should be in the vernacular and geared
to the child's culture. Because the learning of new concepts is in
the language of the home, they should become part of the child's
total mental outlook, rather than just facts related to life while,
at school. The child should also begin learning to speak English
but not to read it. The teacher should develop not only the child's
knowledge of English constructions but his ability to interact with
native speakers of English. His class materials should include
constructions and content that he can use immediately in conversation
in his ordinary daily activities.

During Stage Two, the child should be given the maximum oppor-
tunity to use his newly acquired reading skill. He is to read a
wide variety of content materials written in the vernacular. How
formal or rigid such materials would be depends on the particular
school system. The child is now taught to read and write English.
This will be much easier for him than for children who are not
already literate in their own language. He already knows the tech-
niques and expects a sequence of letters to represent some spoken
form of the language. He will also actually know some of the
English letters because they represent the same sound in his verna-
cular. The task is one of teaching him the special conventions of
English and this is much easier than teaching someone who has not previously learned to read and write in any language at all. Oral English lessons continue throughout Stage Two.

By Stage Three, the child should be able to handle materials in both languages—both in textbooks and in discussion. The teacher needs to develop a broad base of understanding in the child by first presenting and discussing the information in the child's own language, and then presenting the lesson again in English. This develops in the child the kind of bilingualism which gives him access to a large amount of material in both languages and helps him to verbalize a concept in terms of either language. For this purpose, some bilingual programmes have used diglot text books. Separate parallel text books would be equally useful, however.

There may, of course, be some exceptions to the teaching of a lesson in both languages. In arithmetic, for example, the terminology may need to be restricted to English because of the lack of an equivalent numbering system in the vernacular.

In Stage Four, parallel materials should continue as long as possible—the longer the child is learning in both languages, the better. If this is not feasible for economical or other reasons, the school content will of necessity be in English. In any case, English will ultimately become the main medium of instruction. Classes in the vernacular, however, should continue throughout the child's school experience. Some periods each week should be set
aside for the child to learn more about his own language and culture and to give him opportunity for spoken and written expression in his own language. Such classes could include studies of the history of the region from the viewpoint of his own people, the writing of autobiographical materials and of personal experiences outside of the normal community experience.

An Aborigine who speaks the vernacular fluently should assume the primary responsibility for teaching the vernacular side of the programme. The Aboriginal teacher/s should, if at all possible, be chosen by the community and given the necessary training. This training should include the reading and writing of his own language, if he does not already have this skill. Other Aboriginal men and women may also be required for the teaching of Aboriginal cultural skills.

A person who speaks English fluently as his mother tongue should teach the oral English lessons. The English medium lessons should be taught by either non-Aboriginal or Aboriginal teachers who meet the normal qualifications.

A lot of communication and co-operation between all teachers will be necessary if the programme is to be successfully co-ordinated. The Aboriginal teacher/s may need to be given help in improving his English so that he will be able to communicate effectively with fellow teachers. The non-Aboriginal teacher/s should also strive to become fluent in the vernacular so that he can understand the Aboriginal teacher and his culture and be able to discuss the
vernacular side of the programme with him. Neither part of the programme can function adequately in isolation and each teacher must know what the other is doing.

At the outset of the implementation of the bilingual programme in any individual community, the linguist plays a key role. There is still only a limited knowledge of which vernaculars are viable. In some areas, adults speak an Aboriginal language but are no longer teaching their children to speak it. Sometimes the school children speak the language of the peer group and not that of the home. Linguists could ascertain (a) how many vernaculars are spoken by the children, (b) which vernaculars are strategic and should be taught in the classroom, and (c) which is the central dialect where several dialects are each spoken by only a handful of children within the community. While the community itself should make the final decision as to which vernaculars should be taught in the school, the linguist with his knowledge of the overall situation would be able to give valuable guidance where there are no simple solutions to a complex situation.

Investigation needs to be carried out to determine the children's speaking ability in the vernacular and in English at school entrance and at various ages strategic to the development of the programme. Insufficient factual information is available concerning the degree of fluency and the vocabulary content of English spoken by Aboriginal children in most vernacular-speaking communities. The linguist could serve with research teams in these areas of needed investigation or, if
resident in a language area, could collect the data needed for such research.

Educational materials have yet to be written for the vernacular and English facets of the bilingual education programme. Linguists will need to help so that the best possible literature is produced.

For the vernacular part of the programme, primers and supplementary reading materials are in preparation for just under twenty languages. In 1973, pilot programmes began in five languages and more are planned for 1974. There may be as many as forty more languages which will be selected for use in the schools in communities Australia-wide. An alphabet and a knowledge of the structure of each language is basic to the compilation of primers and supplementary reading materials.

For each Aboriginal language, linguistic expertise is crucial in order to obtain the following basic information:

(i) A knowledge of the overall phonological structure is necessary in the designing of primers. An alphabet must be posited, based on a scientific analysis of the sound system. Symbols should be chosen to make transition into English as smooth as possible, and to give as much uniformity in the spelling of neighbouring languages as is possible (given differently structured sound systems). Morphophonemes also should be known. An analysis of the syllable types and their distribution is essential in order to prevent an Aboriginal
child being asked to pronounce units which he cannot say in isolation. Word boundaries need to be determined. In the method devised by Dr. Sarah Gudschinsky (1973), the stressed syllable is in focus in primer construction. Stress patterns, therefore, would also need to be analysed if her method is used.

(ii) Grammatical analysis should include minimal requirements, such as a knowledge of word classes, function words or suffixes, and phrase, clause and sentence structure. Reading materials are designed to promote word and sentence building, and teaching methods often involve the substitution of such items as words or suffixes. Units such as phrases are isolated and used in grammatical drills to help the child to read fluently.

(iii) Idiomatic speech is essential for comprehension and for the sustaining of the child's interest and motivation. Insight into the semantic structure of the language and the cultural behaviour and beliefs is important in the preparation of culturally-based content materials. While some of this could be considered to be in the realm of the anthropologist, a lot of information is assimilated by the linguist in the process of learning to speak the language and in analysing it. Not only must idiomatic speech be included in the primers but it must also be used in a large amount of content and supplementary reading materials which will need to be written. In some cases the linguist may only need to transcribe the supplementary materials from tapes.
For the English part of the programme, bridging materials from vernacular literacy to English literacy are seen as a crucial factor in the success of the total bilingual programme. A prerequisite for such research would be a background in linguistics and education.

In setting up the English course, there needs to be an awareness of areas of particular difficulty for the Aboriginal child. Because there are some grammatical features common to almost all Aboriginal vernaculars, Aboriginal children Australia-wide experience some common problems in the usage of English, e.g., pronouns, pluralisation of nouns, articles, tenses and moods, prepositions and conjunctions, and sentence co-ordinators. The pronunciation of English also may not be accurate because the vernacular has a phonological system that has different phonemes and a different distribution of the phonemes and allophones. Even though some common problem areas are known, bridging materials need to be based on vernacular-specific information in order to facilitate the use of oral English and to provide for smooth transition from vernacular literacy to English literacy for each community.

While the bilingual education programme is in its infancy, present field workers in linguistics and vernacular education are playing, and will need to play, a major role in the preparation of materials for the bilingual education programme. Many linguists are currently spending considerable time in the preparation and testing (or in arranging for testing) of vernacular materials and teachers' instruction manuals. They are or will be involved in preparing language learning courses in
the vernacular for the non-Aboriginal teachers.

For an on-going programme covering all Aboriginal communities, many more linguists and literacy workers will be required, all of whom will need to learn to speak the Aboriginal language and to understand its basic structure. As this is a slow, time-consuming task, it may be some time before bilingual education programmes could even start in some communities.

Perhaps the most productive way of operating on a large-scale, long-range basis would be to train Aboriginals as linguists and/or literacy workers. They would have the advantage of knowing the language in depth (an attainment possible to the outsider only after many years), and of being a member of a community where the language is spoken. Linguistic training would not necessarily need to be at university level but should be sufficient to teach the Aborigines how to discover the basic units of the structure of their own languages. Over the last five years, Aborigines at the Teacher Trainees' Course at Kormilda, Darwin, have been taught some elementary linguistics. Under the guidance of an experienced linguist, two of the teaching officers helped considerably in the formation of alphabets in languages with which they were familiar.

It would be a time-consuming task for each linguist to train an Aborigine in linguistic principles and to guide him in analysing his own language on an individual basis for each language. Ideally, a college could be established where small groups of Aborigines could be taught the principles of linguistic analysis and primer
construction, and be given individual supervision while analysing their own languages, positing alphabets, and preparing primers and other vernacular materials. This could mean an earlier start in a larger number of communities and it would give the Aborigines themselves a more significant role in the formation of educational materials for their own programmes. In addition, Aborigines could be trained to fill such positions as authors, artists, librarians, typists, printers, etc.

The non-Aboriginal teacher also needs training in linguistics so that he can comprehend linguistically-oriented teaching materials and be able to read a linguistic description of the vernacular with some understanding. He would then be able to adapt or modify the English lessons to suit the local situation. Courses are already available at the Summer Institute of Linguistics during the summer holidays. As language learning lessons may not be available for all vernaculars for some time to come, the non-Aboriginal teacher may find it helpful to learn the techniques for using an informant as language teacher.

The most important role that linguists are playing and will continue to play in the development of educational materials for the bilingual education programme is that of research analysts engaged in depth studies of the Aboriginal vernaculars. If a college of linguistics for the training of Aborigines is established, linguists will also be involved as tutors. Until educational materials are completed for all vernaculars and English, linguists will be needed in an advisory capacity to help teachers and literacy workers prepare adequate materials based on the linguistic structures of the languages.
BIBLIOGRAPHY - The Linguist's Role in a Bilingual Education Programme


