The Navajo Reading Study has been prepared for a volume describing literacy projects in the indigenous languages of the Americas. In 1969-70, 2 surveys were made to determine the present language situation of 6-year-old Navajo children. For each survey, a simple questionnaire was sent to all teachers with Navajo 6-year-olds in their classes. Replies provided data on 79% of the Navajo children born in 1964, covering 84% of those actually in school. The results for the 2 years were similar. In 1970, 29.8% of the 3,653 children were reported as knowing no English, 39% as knowing a little English but not enough for 1st grade work, 20.7% as being equally at home in English and Navajo, 5.7% as being speakers of English who knew a little Navajo, and 4.8% as knowing only English. Also, 22 adult Navajos recorded tape conversations with 200 6-year-old Navajo children at 10 different locations on the Navajo Reservation. Interviews were transcribed, in normalized orthography, and key punched for computer processing. A total of 11,128 sentences, 52,008 words (tokens) representing a total of 8,775 different words (types), were processed. Results of the processing included a complete concordance giving each word in the context of each sentence in which it occurs and a list of all the different words in alphabetical order giving frequency and range. Also discussed were the history of Navajo literacy projects, Navajo orthography, concurrent programs for adult literacy as a part of bilingual education, the Navajo reading study, and attitudes toward Navajo literacy. (FF)
THE SITUATION OF NAVAJO LITERACY PROJECTS

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Navajo Reading Study Progress Report No. 17
The University of New Mexico, April 1972
NAVAGO READING STUDY

The University of New Mexico

April 1972

The Navajo Reading Study is supported in part by the Ford Foundation and in part by BIA Contract No. NOO C 1420 4605. This paper, has been prepared for a volume describing literacy projects in the indigenous languages of the Americas to be published by the Literacy Committee of the Programa Interamericano de Linguistica y Enseanza de Idiomas. Bernard Spolsky is presently on leave from the University of New Mexico and carrying on studies in Israel as a Guggenheim Fellow.
The Situation of Navajo Literacy Projects

1. The language situation

With a population of around 130,000 and living in comparative isolation, the Navajo nation has as good prospects as any Indian people in the United States to preserve and maintain their own language. Thirty years ago, scholars pointed out the purity of Navajo, its absence of borrowings from other languages (Haile, 1941; Young and Morgan, 1945; Liebler, 1948; and Reichard, 1951), and its people's "disinclination to learn and speak the languages of other peoples" (Reed, 1944).

But in the thirty years since then, there would seem to have been a considerable change. The amount of contact with English has increased tremendously. A large number of young Navajos served in the armed forces during World War II. An even larger number left the Reservation to work in defense industries. Since the war, contact with the outside world has been slowly growing. As late as 1949, fewer than half of school-age Navajo children were attending school, but by 1955 attendance figures were approaching 90%. The result of this increasing contact has
been a growing use of English. Absolutely and proportionately, the Navajo remain however the largest group of non-English speaking Indians in the United States.

In 1969 and again in 1970, surveys were carried out of the language situation as it showed up in the language use of six-year-old Navajo children beginning school (Spolsky 1970, Spolsky 1971a, 1971b, Spolsky and Holm 1971b). The general method adopted in each survey was to send a simple questionnaire to all teachers with Navajo six-year-olds in their class. Replies to the survey provide data on 79% of the Navajo children born in 1964, covering 84% of those actually in school. The questionnaire was checked for reliability and validity. The results for the two years are similar: in 1970, of the 3653 children included, 29.8% were reported as knowing no English, a further 39% as knowing a little English but not enough for first grade work, 20.7% as being equally at home in English and Navajo, 5.7% as speakers of English who knew a little Navajo, and 4.8% as knowing only English.

These data give us some picture of the present language situation, for the language use of a six-year-old when he comes to school is very good evidence of home
language use and parental attitude. In 10% of the cases, we find a nearly complete switch to English, and in another 20%, a kind of bilingualism that can only result from extensive use of English in the home. In the remaining 70%, however, it is clear that Navajo is being spoken to the children at home by their parents.

The spread of English is encouraged by a number of factors. On the Reservation, the strongest pressure is school. Of all situations, school is the one most likely to demand English. Traders generally speak Navajo; Public Health and BIA officials use interpreters; churches and missions use Navajo. Only school insists on English. The effect is there even before a child goes to school: in a study of the relation between accessibility to school and language use, a clear tendency showed up for six-year-olds to know more English the closer their family lived to the school (Spolsky, 1971b). A second major pressure is ease of access to off-Reservation towns. In the survey, a good correlation (.52 in 1969, .55 in 1970) showed up between the ease of access to the nearest off-Reservation town and the amount of English spoken by six-year-olds. A third source of pressure, on which no data are available, is probably access to mass media and recreation: radio, movies, television, rodeos, and dances (at which country and western music is popular).
Behind this general picture are two major divisions: one demographic, involving a clear distinction between traditional rural and progressive "urban" Navajos, and the other a kind of diglossia affecting the spoken and written channels of communication. Evidence supports the notion that there is a clear and growing difference between the language use of those Navajos who live in or near the growing semi-urban communities such as Window Rock, Tuba City, Chinle or Crownpoint and whose children attend public schools, and those who live in the rural areas and whose children go to Federal boarding schools. This distinction is illustrated by the situation of six-year-olds coming to school: only 2% of the children coming to BIA schools were English dominantly while 18% of the children coming to Public schools were: 42% of the children coming to BIA schools knew no English at all, while only 16% of the public school children fell into this group.

The diglossia shows up as a result of the weakness of literacy in Navajo. Virtually all written activities are conducted in English. Tribal Council meetings and business are mainly in Navajo, but all records and legislation are in English. Chapter meetings use only Navajo, but minutes are kept in English. Tribal court sessions are held in
Navajo, but records are written in English. The communication media show a similar distinction. Most radio stations on the peripheries of the Reservation broadcast an hour or more a day in Navajo. The broadcasts consist of country and western music (in English) with news, announcements, and advertisements in Navajo. The Navajo-language announcers, however, work from English scripts, translating as they go. The official Tribal newspaper, on the other hand, is entirely in English, and even the more recently established unofficial papers use English almost exclusively. Navajo words appear occasionally, as often as not misspelled. A letter written in Navajo to the Tribal newspaper congratulating them on having run an advertisement with a few Navajo words in it was never published.

These facts point to the failure of earlier literacy projects, and provide a background against which we will be able to consider present attempts.

2. **History of Navajo literacy projects.**

There have been a number of attempts at developing literacy in Navajo (For a fuller picture, see Spolsky, Holm and Murphy, 1970). The earliest were the efforts of Christian missionaries. By 1910, both the Roman Catholics and the Protestants had developed their own
orthographies and had begun publishing materials, including a catechism for children. These efforts have continued, and are referred to in references to adult programs below.

In the late 1930's, the Bureau of Indian Affairs started a lay literacy program. This was part of the Collier administration's new program of respect for tribal integrity which replaced earlier policies of forced assimilation. For some time, it had been apparent that children were not succeeding with a school curriculum entirely in English, and that the vast majority of the adult population knew no English. A practical alphabet was developed using for the most part the same letters as are needed for writing English. A primer and a few other readers were prepared.

In 1940, the teaching of reading and writing in Navajo became part of the curriculum of some schools. The main purpose of the readers, which were bilingual, was admittedly to teach English, but for the first time, Navajo was permitted in the school and even encouraged. When children were allowed to take their books home, they read them to their parents who received from this a new vision of schooling.

At the same time, an adult literacy campaign began. The demand for teachers far exceeded the supply;
nevertheless, there were soon people in many communities who could read their own language, and it was suggested the official forms and government regulations be printed in Navajo. Pamphlets were translated in Navajo dealing with conservation, livestock management, and health. A Navajo language newspaper was started in 1944, and continued publication until 1957.

But the demands for better education that followed the return of the World War II veterans and of those who had worked in war industries was for education in English. Navajo was used in the post-war Special Program for Navajo Adolescents, but only as a transition to English: the readers were bilingual but their aim was to teach English and prepare the Navajo adolescent to leave the Reservation.

The demand for education in English, the fear of differences as un-American, and the government policy of transition from Federal to State schools, were all of them too much for the relatively weak Navajo language and literacy programs, which, except for some missionary activity in adult literacy, were virtually dead by the early 1960's.

In the last three years, there has been a new flurry of activities, connected with the political recognition
of minority groups and particularly with the funds available under Title VII of the ESEA.

3. **Navajo Orthography.**

As mentioned above, a practical alphabet for Navajo was developed in the 1930's. Its use in the standard dictionary and grammar (Young and Morgan, 1945) and in most modern publications has established its place firmly. At a Conference on Navajo Orthography, called in 1969 by the Center for Applied Linguistics it was accepted with certain modifications. The alphabet agreed on at the Conference was as follows:

- a, b, ch, ch', d, dl, dz, e, g, gh, h, hw, i, j, k, k', kw, l, ŋ, m, n, o, s, sh, t, t', tḥ, tš, ts, ts', w, x (if 'h' is ambiguous), y, z, zh, '.

Length of a vowel is indicated by doubling; high or falling tones are marked by an acute accent; nasalization is marked with a hook under the vowel; and initial glottal stops need not be written.

The generally accepted orthography is basically phonemic, with a degree of morphophonemic and morphemic spelling starting to appear. A major study of the orthography will shortly be completed (Holm, 1972).
4. **Current Programs for Adult Literacy.**

Adult Basic Education classes for the unschooled are taught by teachers who do not know Navajo, and introduce the students at once to written English. On the initiative of Summer Institute of Linguistics workers, an experiment was recently tried at a BIA Adult Education course in Tohatchi making some use of Navajo. The SIL "Let's Read" reader is being revised, work-book material prepared, and a teacher's instruction book written.

Navajo is now taught at a number of universities, many of the students being Navajos who learn to read write their language for the first time. Courses are given at Navajo Community College, but the two instructors who developed the program there are both away this year, and it is difficult to find a qualified replacement. At Northern Arizona University, Irvy Goossen is developing a new set of literacy materials; his introductory college course "Navajo Made Easier" is widely used. Brigham Young University has also recently published a "Navaho Basic Course" prepared by Robert Blair, Leon Simmons, and Gary Witherspoon. At the University of New Mexico's Gallup Branch, Alan Wilson has published an elementary reader, "Breakthrough Navajo" and a reader
"Laughter: the Navajo Way". He is working on a text for medical Navajo and an anthology. The University of New Mexico now offers two years of Navajo.

5. **Literacy as part of Bilingual Education.**

Since 1968, there has been some initial reading teaching in Navajo at Rough Rock Demonstration School and at Rock Point Boarding School. Rough Rock Demonstration School, an independent school under local Navajo control, started in 1966 with emphasis on English as a Second Language, Navajo reading being taught to the older children. However, there was an increasing recognition of Navajo, and Linguistic Readers are used to teach reading in English. Some attempt is now being made to maintain literacy skills in Navajo in the second grade and beyond.

Bilingual programs have now been started at Sanostee and Toadlena (the emphasis is on teacher training) in San Juan School district (a number of films, film strips, tapes, and other materials have been prepared), at Cortez, and at Gallup. All are handicapped by shortage of materials and the lack of trained teachers.

Most materials used for teaching reading are locally prepared; there is no complete first reader. An analytical bibliography of Navajo Reading Materials was prepared in 1970 (Spolsky, Holm and Murphy): a few small books have come out since the...
Most of the programs have teacher training components, and a good deal of emphasis is given to literacy training. The Navajo Educational Association (DBA) has been running summer courses, and plans next summer to run an intensive Navajo linguistics workshop. But as there are still very few people who write Navajo well, the quality of instruction in some of the training programs is not high. Basically, it is generally true that Navajo aides and teachers are being called on to do, as best they can, something they have not been trained to do and have not seen done.

6. The Navajo Reading Study.

Started at the University of New Mexico in 1969 with BIA support, and funded since then by the BIA and the Ford Foundation, the Navajo Reading Study has been investigating the feasibility and effect of teaching Navajo children to read in their own language first. It was thus intended to carry out research on the hypothesis that children can learn to read a second language better if their first introduction to the reading process has been through the medium of their native language.

A first step was a survey of all materials relevant to teaching Navajo reading (Spolsky, Holm and Murphy, 1970). Materials suitable for teaching reading in Navajo was found to fall into four main groups. A number of small books
have been prepared by the Summer Institute of Linguistics workers: still in print are a 68-page beginning reader, a set of charts and teaching aids, and some translated portions of the bible. A second group consists of materials prepared for the BIA in 1940-50: four bilingual "Little Herder" readers, a bilingual "Little Man's Family Series", and a bilingual "Navajo Life Series". The third group consists of textbooks prepared for teaching beginning Navajo to non-Navajo speaking adults. These three groups are all usable, but the religious bias of the first, the emphasis on English of the second, and the college foreign language approach of the third seriously limit their suitability to initial teaching. The fourth group, very little of which has appeared, is the material prepared by the bilingual programs referred to earlier.

To learn more about the possibility of these materials and the methods used to teach reading in Navajo, a conference of Navajo educators working in initial reading instruction was called (Murphy, 1970). Each teacher was found to have developed his or her own approach, using whatever materials could be found or prepared. Each was thus a pioneer in establishing methods and materials.

The survey and the conference made clear that any fair test of the value of teaching reading in Navajo must be
preceded by the preparation of good materials. As a first step towards this goal, it was necessary to find out more about Navajo children and the language they know.

One aspect of this study was to look at the language situation of six-year-old children: reference has already been made to the two surveys carried out in 1969 and 1970 and the studies based on them. The second was a study of the language of six-year-old Navajo children.

In recent years, there have been a number of studies of child language, any one of which might have served as a model. One might choose to look at the language of one child in depth, or to survey the language of a number of children. One could choose to collect a corpus of free speech, to elicit specific linguistic forms, or to test for the comprehension of specific forms. One could choose to concentrate on phonology, syntax, lexicon, semantics, or style, or to attempt to cover all. In actual fact, it was decided to collect a corpus of six-year-old speech which would permit a study of grapheme frequency and patterns, of lexical frequency, and of morphological complexity, and allow for a start on syntactic analysis.

The limitations of the corpus must be emphasized. The texts were collected in free conversation between adult
Navajos and the six-year-old children they were interviewing: the sample is thus restricted in style and situation. A corpus is limited to the forms that occur in it: it does not show anything like the full range of potential forms. And it is limited to the topics chosen by the interviewers.

Between October 1969 and June 1970, twenty-two different adult Navajo interviewers recorded on tape conversations with over two hundred six-year-old Navajo children at ten different locations on the Navajo Reservation. All the interviews were transcribed, in normalized orthography, by one transcriber who herself key-punched them for computer processing. Altogether, a total of 11,123 sentences were processed. The complete corpus consists of 52,008 words (tokens), representing a total of 8,775 different words (types). Output of the processing include a number of statistical measures, a complete concordance giving each word in the context of each sentence in which it occurs, a list of all the different words in alphabetical order giving frequency and range, a reversed alphabetical word list for study of suffixes, a frequency list, a number of spelling lists, data on grapheme and unit frequencies, and a concordance of English loan words (Spolsky, Holm, and Embry 1971).
As a result, the Study has prepared a number of publications. A Spoken Word Count of Six-Year-Old Navajo Children (Spolsky, et al, 1971) lists in the order of their frequency all words that were used by at least two different children; a supplement lists, in alphabetical order, all words in the corpus, whether used by children or adults, and for each word gives frequency and range data for adults and children separately and together. Grapheme and Unit Frequencies in Navajo (W. Holm, 1971) presents the results of an analysis of the frequency of occurrence of graphemes and spelling units in the corpus. English Loan Words in the Speech of Six-Year-Old Navajo Children (A. Holm, W. Holm, and Spolsky, 1971) is a study of the extent to which the speech of the children includes words borrowed from English. A supplement provides a concordance, with sentence context, of all such words. In final stages of preparation is a set of Spelling Lists.

As a further step, the Study has started some pilot work in preparing reading materials in Navajo (Atcitty, et al, 1971). A group of Navajo college students worked with experts in curriculum preparation and book design and planned a dozen sample readers of different kinds. One has so far been published (Atcitty and McHarney, 1971) and others are ready for printing. Emphasis has been on preparing original Navajo work.
A central part of the work of the Navajo Reading Study has been to provide training for Navajo teachers and researchers: the research assistants working with the Study will hopefully provide a highly trained nucleus for future activities.

7. **Attitudes towards Navajo literacy.**

While there are comparatively few Navajos who can read their own language, it is reasonable to state that all are happy it is in writing: there is no opposition to writing Navajo. But parents are far from being convinced that there is educational value in their children's learning to read Navajo. There is some ideological commitment to Navajo literacy, associated with Navajo nationalism. But, paradoxically, it is often strongest with young urbanized college-educated Navajos who themselves don't speak Navajo. And some of the more effective people in the field come from a missionary background. The present wave of activity is still largely the result of external initiative, but it shows more promise than the earlier ones. The pre-war campaign was too closely associated with the stock reduction program, the post-war activities too closely associated with relocation, to develop any popular support. Literacy in Navajo remained an alien concept.
But the more recent attempts have better promise of success, for two factors are converging to support them. The first is the change in educational climate. There is growing evidence that teaching reading is easier in a child's strongest language. Thus, it is possible to persuade educators that children should be taught to read in Navajo. And the availability of funds for bilingual education has made such programs attractive and feasible. The second factor is probably even more important, for it involves pressure from within the Navajo people rather than from outside. It is exemplified by the community school movement. The examples of Rough Rock Demonstration School, Rock Point School, are applying pressure to the BIA and the State school systems to pay much more attention to the wishes of the community. The new Navajo Education Association (DBA) and the new Tribal Education Division are emerging as forces in education on the Reservation. DBA is committed to bilingual education, and could develop into the focus for Navajo language maintenance.

For the first time, then, there are signs of pressure from the Navajo themselves for literacy in the vernacular. The situation is precarious, for the various activities do not yet add to the development of the needed leaders, teachers, and materials. The next few years will tell
whether the combination of educational needs and growing nationalism will be enough to produce permanent results, and to lead to widespread literacy in Navajo.
Notes

1. In preparing this report, I was helped by information and opinions communicated by, among others, Wayne Holm Elizabeth Willink (Rock Point School), Irvy W. Goossen (Northern Arizona University), Alan Wilson (University of New Mexico), Faith Hill (Summer Institute of Linguistics), and Gary Witherspoon (Yale University); and by data provided by the Office of Education of the Bureau of Indian Affairs, the Blanding Indian Education Center, Project SUN, and the Gallup-McKinley County Public Schools.
References


