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ABSTRACT
                The present issue of "English for American Indians"
follows the format and approach of the Spring 1970 issue. (See ED 040
396.) In the lead article, Evelyn Hatch surveys some of the research
in first language acquisition and points out its implications for
second language teaching. Her main thesis is that with the best of
intentions, teachers often insist that children in
English-as-a-second-language classes achieve a mastery of certain
structures that is beyond the mastery achieved by "advantaged" middle
class children who speak English natively. Following her article, she
reviews three new books on child language. Bilingualism is the
subject of most of the items included in "Information Exchange,"
which describes important surveys of the field, discusses the need
for bilingual programs and presents a definition of their structure,
and reports on individual programs for American Indian children. A
special section of "Information Exchange" deals with the American
Indian languages themselves, with maps, lists of the most widely
spoken Indian languages and Summer Institute of Linguistics linguists
working on them, and a brief report of a study of social factors
involved in Shoshoni dialect variation. Two sets of materials are
worked on: the CITE materials for Navajo children, and the Michigan
Migrant Workers Council materials for Spanish-speaking children. (AMM)

ENGLISH FOR AMERICAN INDIANS

A newsletter of the Office of Education Programs
Bureau of Indian Affairs

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A Newsletter of the Office of
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Bureau of Indian Affairs
United States Department of the Interior

UNIVERSITY OF UTAH

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FOREWORD

A student of schooling American Indian children soon learns that innovation comes in cycles. What was new at one point in the past somehow dropped out of practice only to emerge in contemporary times as an innovation. This is the case regarding bilingual education for American Indian education. Ever since formal education was first offered native Americans it has come and gone and now, fortunately, is with us again.

Bilingual education seems to foster a certain excitement. Perhaps it is the deepening of understanding between children and teachers. On the other hand, it may be the realization by Indian children and their parents that the tribal language, that aspect of their cultural and personal lives that tells most about them, has been accorded the dignity that accompanies becoming a part of the school curriculum. Whatever the reason, it is important to keep in mind that bilingual education has the potential for achieving goals that schools have long espoused. In this day and age, when there is so much of the negative in life, as educators, we are indeed fortunate to have American Indian languages available for schooling purposes. After all, Indian languages are as truly Americana as any feature of this country and efforts to make them a part of the school program are encouraged and accorded a deserved priority.

Wilma L. Victor
Acting Director, Education Programs

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EDITOR'S NOTE

The present issue of EFAI follows closely the format
and approach of the spring issue of 1970. There we an-
nounced our policy of focusing in some detail on topics of
current concern in the planning and development of language
programs and of raising in the course of the reviews and
reports some of the essential questions that must be con-
sidered by supervisors, teachers, and those responsible for
preparation of materials. For this issue we have confined
ourselves largely to two topics--language acquisition and
bilingualism.

In the lead article, Dr. Evelyn Hatch surveys some of
the research that has been done in first language acquistion
and points out its implications for second language teaching.
Her main thesis is that with the best of intentions we have
often insisted that our children in ESL classes achieve a
mastery of certain structures that is beyond the mastery
achieved by "advantaged" middle class children who speak
English natively. She also points out that currently avail-
able ESL materials do not take into account the research
that has been done in child language when they make deci-
sions about the selection and sequencing of grammatical
content. Following her article, Dr. Hatch reviews three
new books on child language that have made significant con-
tributions to the field. Dr. Hatch is on the staff of the
English Department at UCLA and is consultant to the South-
west Regional Laboratory for Educational Resources and De-
velopment (SWRL) in Los Angeles. Two of her studies (Four
Experimental Studies in the Syntax of Young Children, and
The Five Year Old's Comprehension of Expanded and Trans-
formed Conjoined Sentences, with J. Sheff ard D. T. Chas-
tain) ..ave been published by SWRL.

Bilingualism is the subject of most of the items in-
cluded in the "Information Exchange." Here we have men-
tioned important surveys of the field as a whole; we have
summarized significant statements about the need for bilin-
gual programs and a definition of their structure, and we
have reported briefly on individual programs that are de-
signed for American Indian children.

However widely they may differ in design, all bilingual programs have one element in common--all of them must, in some way or other, take two languages into account. Where the child comes to school with a dominant home language other than English, most linguists would maintain that effective materials and techniques must be based at least in part on a comparison and contrast of the two languages. This is why we have reported briefly on three articles which will familiarize our readers with the well-known contrastive studies that are available and with some of the theoretical issues presently being debated by linguists concerned with approaches to contrastive analysis.

A final section under the Information Exchange deals with the American Indian languages themselves. Here, in addition to maps which show where the languages are used, we have included a list of the most widely spoken Indian languages and a list of SIL linguists who are working on American Indian languages, some of whom are already being consulted in the preparation of literacy materials for bilingual programs. Included also is a brief report of a study of social factors involved in dialect variation of Shoshoni. While dialect variation in English has received a good deal of attention of late, dialect variation within American Indian languages has until recently been neglected.

Our readers familiar with the subject hardly need be reminded of the scarcity of teaching materials available for the bilingual classroom. In our "Materials" section, we have chosen to report in some detail on two sets of materials which are quite different in approach. The CITE materials, which are presently being developed for the Navajo by Dr. Robert Wilson and his staff, have a number of innovations, chief among them perhaps the idea of a total curriculum based on two assumptions: that all subjects must be introduced through language that has been carefully taught, and that "ESL" cannot succeed if it is taught as an isolated subject and divorced from the other content areas. The role of the first language, then, seems to be largely that of providing a bridge for the introduction of new concepts and ideas as well as an instrument for developing the child's self-image and identity. For this reason the materials would be readily adaptable to other situations where the dominant home language is to be so used.

Since much more has been done to date in Spanish, we have also included a review of the oral language program

developed by the Michigan Migrant Workers Council, under the direction of Ralph Robinett. Here the emphasis on the "other" language is much more evident, for all basic concepts are first aught in Spanish.

We conclude with a plea to our readers to suggest topics and to supply information about projects in which they are involved. S urces of support for new programs are many --state and cou, y overnments, federal agencies, tribal councils, etc. 1 or this and other reasons it is often difficult to learn o. the new projects that are being developed, and it is eve more difficult to find out detailed information about goals, over-all design, and approach. Only through your cooperation can we hope to make this Newsletter a genuine orum for the exchange of ideas by those most concerned with the teaching of English to American Indians.

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THE LANGUAGE CHILDREN USE: A LOOK AT THE FACTS

by Evelyn Hatch

Each year many ESL teachers come back to the class room armed with new techniques we have learned at summer institutes or with new materials which both incorporate language-learning techniques and supply enough variety in activities --language teaching games, songs, stories, puppet plays, etc.--to keep lively children interested. With these materials and techniques, many of us confidently begin a new year working again on accurate pronunciation (<u>ship</u> vs. <u>sheep</u>), subject-verb agreement, the pronoun system, and the mass of other distinctions which the child must "master" before progressing to more difficult structures. Then we find, as the months pass, that many of the children are not meeting our expectations (or the criterion tests) on these "easy" items and we begin to question the method, the materials, our own teaching ability, or even the intelligence of our students.

The fact is that a large number of these problems cannot be blamed on faulty methods, materials, teaching ability or on the "disadvantaged" child. A few hours spent listening to the speech of the "advantaged" Anglo child in any kindergarten, first, second, or third grade may hold the answer to many of these problems for us. And a careful examination of research in first language acquisition can answer even more. For many of the items that we try so hard to get our students to <u>master</u> are those all children, even native speakers, have trouble with.

Perhaps so little attention has been paid to this obvious area of comparison because of constant reassurances that the Anglo child has, on entering school, "mastered his language" or that the child "knows his language by the age of five." Such statements have been swallowed whole by all of us. And this has led us to believe that the only meaningful criteria for sequencing lessons or for setting "mastery" standards must be pedagogical (in which structures build on previously taught structures) or contrastive (in which structures will be difficult for the child because of likely interference from his first language.)

Searching for evidence to show that these claims about
first language "mastery" by age five are true, we look to
such famous studies as Jean Berko's on the child's learning
of English morphology or to the paragraphs in Chomsky, Len-
neberg, and other sources where language acquisition is
described as an amazing 30-month process made possible by
wired-in abilities set off by physical maturation. A closer
look at these sources, however, shows that no such sweeping
claims on complete language mastery are made by the authors.
Berko's data, for example, shows that only 28 percent of
the responses given by children for plurals using the /iz/
form were correct and approximately half of their responses
on simple present tense were not standard forms. Bellugi-
Klima and others investigating early childhood language
have, in fact, emphasized again and again that the child has
mastered his language, but that it is his language that he
has mastered and the rules of child language are not neces-
sarily the same as those of an adult. While he may produce
all kinds of sentences, there is no guarantee that the sen-
tences would meet either adult standards or those that the
ESL teacher tries to set for her young students. How many
of us, for example, would be pleased if only 28 percent of
the responses given by our students in an /iz/ plural prac-
tice were correct?

Certainly the child has established a truly impressive
language framework by the age of four or five, but many
children have not mastered complex structures nor have they
made many of the finer discriminations in features that we
try to teach elementary ESL learners. Current research in
child language shows us how questionable our assumptions
about the child's "mastery" of language are.

Current research and research methodology has its roots
in the early work of Roger Brown at Harvard, who, with his
students, recorded the language development of three chil-
dren, the now-famous Adam, Eve, and Sarah. The amount of
data collected in this observational study (data acquired
by observing and recording the language development of a
child over a long period of time) was overwhelming. Sepa-
rate parts of the data--the development of the noun phrase,
question forms, and negation--have been described by Brown
and Bellugi (1964), Bellgui (1965), Brown (1968) and others.
These reports are of great interest for the light they shed
on strategies children may use in language learning. Few
people, however, have the time, patience, or money--grants
in child language are not that plentiful--to do observa-

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tional research. Some investigators have also felt that a
larger number of children must be studied before relevant
conclusions for language teaching or for reading programs
could be made. The trend recently has been towards smaller
experimental studies on a particular structure or group of
related structures.

Three types of experimental studies appear most fre-
quently: production, comprehension, and imitation tests.
The Berko study is a model for production experimentation.
The child is shown a drawing and the experimenter says "This
is a wug. Now there are two of them. There are two ____."
The child (hopefully) replies with the plural form of the
noun and his pronunciation of the plural form (/s/, /z/, or
/ɨz/) is recorded on a form. With the data from a large
number of children it is then possible to say whether the
young child has acquired the rules for a fairly wide vari-
ety of morphological endings.

In a comprehension experiment, a nonverbal behavioral
response is expected for the sentence types being tested.
For example, the child may be presented with toy animals
and asked to "Show me The cow is kissing the calf" or
"Show me The cow was kissed by the calf" or similar sen-
tences. The child uses the toys to act out the sentences,
thus giving evidence of comprehension of active vs. passive.
In this way it is possible to find out whether the child
understands a given structure before he is able to produce
it accurately.

In imitation experiments, the child repeats test sen-
tences. On occasion this can give interesting information
about the child's language. Osser (1969), for example,
gave young children sentences which contrasted verbs which
do or do not take progressive endings (e.g., "Mama is cook-
ing dinner" vs. "everyone is owning shoes"). Repetitions
of the ungrammatical sentences were slower and many chil-
dren substituted other verbs or changed the sentence en-
tirely. Some children simply refused to repeat sentences
which didn't sound right to them.

Of course, the findings from these child language ex-
periments ought to be common knowledge to writers working
on ESL materials. They ought to be taken into account in
the sequencing of lessons for the bilingual child. Unfor-
tunately, they are not. A careful distinction must also be
made between structures which the child must comprehend,

understand, and respond to versus those he must produce
with 100 percent "mastery." And unfortunately, no materials
are available at the moment that make this distinction be-
tween comprehension and production. What is the teacher to
do then? One possibility is to note the areas where bi-
lingual children seem to have the most difficulty and ask
whether these are structures or concepts which the Anglo
child of comparable age has mastered. And help is available
through the studies that have been made, many of which are
reported here.

The studies listed below are on fairly simple struc-
tures, since these occur in early ESL lessons. As a word
of warning, none of the experimenters claimed that no child
was able to produce the forms cited, nor did they claim
that the children who failed to produce the forms would
always fail to perform. The data, in each case, do have
to meet statistical significance levels. They cannot, there-
fore, be dismissed simply as "performance errors."

Inflections and Word Subclasses

Noun Inflections

Berko found that young children did not produce the
/iz/ plural with much consistency. For example, the child
might say three horse instead of three horses.

As Susan Ervin-Tripp (1964) noted in her experiment
with young children, the problem with the /iz/ ending ap-
pears in all its functions; possessive forms without an
additional sibilant (That's Sis book.) are common.

Verb Inflections

In the simple present, Berko showed that the /iz/ form
is difficult for many young children (47 percent correct
responses). Some children make an early /s/ vs. /z/ dis-
tinction with the /iz/ form as /∅/ (He flash the light on
me). Then once the /iz/ form begins to appear, it is tried
out in all three categories (He jumpses on my bed. He
runses round and round that table. He dances by hisself).

Contrary to expectation, children learn most irregular

past forms first as lexical items. Later, when they have learned the regular past rule, they begin to regularize the previously learned irregular verbs or produce the two forms in variation (cf. Ervin-Tripp, 1964). This variation of forms persists well into the upper grades with children producing such forms as He ran/ranned/runned/run around the block. First and second grade data (cf. Menyuk, 1964) give numerous examples of this variation. Of the three regular past tense forms, many children have difficulty with the /id/ form He land on the roof; He make-tid magic just as they did with the simple present /iz/ form.

Irregular participles are regularized by both elementary and secondary school children (cf. Turner and Rommetveit, 1968). It's not unusual to hear even teenagers using rided, catched, and throwed in their informal speech.

Noun Subclasses

The child generally assimilates mass nouns to the count noun category, saying I want two chalks and How many gums you want? Given a game where children asked each other how much/many questions as required by the two noun categories, kindergarten and 2nd grade children were neither able to ask or answer the questions with standard forms (Hatch, 1969). Questions like How many lettuces? How much oranges? and answers like I want three bread; Gimme two banana, may sound like examples of an ESL child's struggle with English; but they occur directly in this data from upper-middle-class Anglo children, "advantaged" second graders.

Pronouns

The object pronoun as subject is very common in the data for young children (Hatch, 1969), the most frequent "errors" occur in third person pronouns (Them is the good guys; Her came in the door). Kindergarten and 1st grade children also pay little attention to gender and number, readily referring to momma as he, and Jimmy and Tom as she. Smith (1969), noting that Spanish children learning English repeatedly used he in speaking of their mothers, writes that he was surprised on visiting a first grade class to find that native English-speaking children were doing the same thing.

Simple Transformations

Negation

Children have little difficulty with sentence negation
but most children do not produce forms of constituent nega-
tion in the early grades (His shoes are untied; There are
no marbles in the box) without double negation problems.
Comprehension tasks usually show that all children (and
adults) find negative statements to be more difficult than
affirmative because of "truth judgment" problems.

Simple Questions

While there is no experimental data on frequency of
questions without the auxiliary (How many you want?) or on
doubly marked forms (Did he went?), examples do occur in
the data. Bellugi-Klima (1965) discusses the stages of
question formation of three children.

Passives

The passive is certainly the most researched topic in
child language; all research shows that be passive is dif-
ficult for children. The got passive, however, has not
been investigated and seems to be used almost exclusively
by young children when they wish to use passive voice. The
agent is seldom included (The boy got hit). As noted above,
irregular participle forms are regularized by many children
(The ball got throwed over the fence) and doubly marked
forms (That dog got caughted) are common.

Other Transformations

Comparatives

Graeme Kennedy (1970) showed that "even in the rel-
atively restricted area of quantitative comparisons, chil-
dren have by no means mastered comprehension of the linguis-
tic devices for comparatives by the time they enter school."
The difficulty of comparatives depends partly on linguistic
form, partly on negation, and partly on whether quantities
are the same, greater, or less in quantity. Children up to
the fifth grade level gave fewer correct responses to nega-

tive comparatives (There aren't as many oranges as apples)
than to affirmative. Children gave fewer correct responses
to minus quantities (There are fewer pencils than pens,
There is less ice cream than cake; The number of marbles is
smaller than the number of balls). Doubly marked compara-
tives (He is more taller than you) and alternate forms (He
can swim the same fast as I can) are very common in the
speech of young children.

Time Clauses

     Time clauses that violate order of occurence also are
difficult for kindergarten and 2nd grade children (Hatch,
1969). For example, given a sentence like Move a red one
before you move a yellow one, the child will move first a
red marker and then a yellow one. Given a second command
like Before you move a yellow one, move a red one, the
child will still move the markers in the order mentioned,
first a yellow and then a red. Prior to 2nd grade, children
showed no real comprehension of time connectives unless the
order of mention was the same as the order of action re-
quired.

Relative Clauses

     Slobin (1967) and others have remarked on the early
appearance of comprehension of relative clauses by young
children. His informant repeated simple subject focus rel-
atives as conjoined sentences. (Given "Mozart who cried
came to the party," she would repeat Mozart cried and he
came to the party). Object focus relatives, however, were
beyond her ability to repeat. Douglas Brown (1970) reported
that object focus relative clauses were much more difficult
than subject focus (The boy that the girl is talking to
is wearing a hat vs. The boy that is talking to the girl
is wearing a hat). Relative pronoun difficulty could also
be ranked, showing that who and who deletion were much more
difficult than which or that. Observational data shows
what is frequently used as a relative pronoun (The guy hit
the boy what talked) by young children.

Infinitive Clauses

     Chomsky (1968) showed that children had problems with
pronoun reference following contrasts in "A told/promised B

to C'' type constructions. Given directions like: Mickey told/promised Bozo to jump/dance/run. Make him do it, children up to the age of 9 were unable to give consistent responses. Luria and Kramer (1969) found that it was not until 12 years of age that children could handle the "minimum distance" problem. That is, children regarded the closest noun, Bozo, as the subject of the infinitive in Mickey promised Bozo to dance.

Conditionals

Kindergarten subjects give no consistent evidence of comprehension of conditionals like if...then, if not...then, unless...then, or unless...then not. Asked to look at a colored disk and to follow commands, the children could not make correct choices of whether or not to follow commands like: if it's red, wiggle your fingers; if it isn't blue, raise your hand; jump up and down unless it's yellow; don't touch your shoes, unless it's black. Second grade children could respond correctly to if...then commands, gave close to chance responses to if not...then and unless...then not and uniformly misinterpreted unless...then sentences (Hatch, 1969). Few children, however, misinterpret formulas like Don't come to the table unless your hands are clean!

Indirect Questions

Olds (1968) used a game situation in his study of connectives of various types. He found that children were unable to respond accurately to commands like Tell/Ask your opponent how many places to move. Chomsky (1968), also interested in testing embedded questions, used ask/tell as part of the stimulus sentence and found that none of the children (up to age 10) were able to perform the task exemplified by such sentences as Tell/Ask Laura what to paint. For the ask statement the child would respond Laura, what do you wanta paint? or even Paint the box.

The last finding explains why indirect drill cues such as Bill, ask Maria how old she is or Ask Bill what color it is so frequently provoke responses like I'm eight and It's green from ESL children rather than questions.

A wealth of information on frequency of structures is available from analysis of tapes of the Anglo child's lan-

guage in a variety of natural situations. Loban (1964),
O'Donnell (1967) and others have charted frequency of pat-
terns. Sample percentages for children in third grade ac-
cording to O'Donnell show 43 percent of all sentences as
Subject-Verb; 44 percent Subject-Verb-Direct Object; 4
percent were sentences with be; 3 percent were there is/are
sentences; zero percent indirect object sentences. Such
information (complete data is available in the mentioned
studies) should also be used in planning materials for young
ESL learners. If the Anglo child produces a large number
of Subject-Verb and Subject-Verb-Object sentences in his
natural speech, it seems that we would want young ESL learn-
ers to thoroughly master these patterns. If the Anglo child
seldom uses the indirect object, or there is/there are sen-
tences, then perhaps less time should be spent in requiring
the young child to completely master these less frequent
forms.

No doubt teachers at this point are asking, "What am
I to teach then? Isn't it important to teach pronouns?
Don't my students have to learn /iz/ plurals? What a lot
of nonsense ¦" I agree that these forms must be taught.
But, as a teacher, you must decide for yourself what is
meant by such generalized textbook objectives as "the child
will master the basics of the English language." Does this
mean "mastered" as much as the Anglo child of the same age
has mastered each structure? If it does, then it seems
reasonable that you will not stay at a dead halt struggling
over the same material week after week when you know that
the structure you are working on is one that all children
--even the "advantaged" ones--have trouble with. Most
teachers haven't the heart (or the patience) to insist on
100 percent mastery anyway but, if they do, then they should
know they are facing a double battle in fighting developmen-
tal levels as well as the regular language learning battle.

Some alternatives can be considered. An obvious first
step is to make sure that difficult structures, once intro-
duced, are re-introduced periodically throughout the course.
Many textbooks do assume that once an item is taught, it's
taught; and that item never reappears again in the book.
If cyclical review is not obvious, make sure you add as
many re-introductions of the structure as you can throughout
the year.

A second possibility is to make a distinction in terms
of what kind of "mastery" you expect. Even when Anglo chil-

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dren say How many gums you want? they understand when some-
one says How much gum do you want? One hundred percent
mastery in terms of comprehension of such structures can
be demanded and some lesser standard set for production of
the form by very young ESL learners. Teacher language ver-
sus child language is also a helpful dichotomy. Many teach-
ers have made strong, and I believe wise, pleas for first
introducing a new structure or new vocabulary item not by
teaching the child to say it but by using it in her "teacher
language" with him long before that time. After all, this
is not so different than our old reliable saw of "listen,
speak, read, write and in that order."

The final, and I hope the strongest, remedy to apply
is to break from the paradigmatic mold. What is there that
dictates all pronouns--first, second, third person, singu-
lar and plural, subject, object, and possessives--must be
presented all at the same time? Research shows that when
the number of contrasting items is that large, little learn-
ing can take place. Yet this is precisely what we try to
do over and over again. What is there that says we have
to teach all prepositions together--by, in, on, at, near,
around, next to, in front of, in back of, behind, through,
etc.? What is there that says we have to teach all compar-
atives together? What is there that says we must present
all the variations of the conditional if-then/unless-then
group when we know that native speakers in the elementary
grades give little evidence of actually comprehending them?

Common sense (and research!) can tell us that children
talk about I, me, and sometimes you. Work for mastery of
those first. It tells us that children use affirmative
comparisons (the big man, the great big man, the biggest)
but not the negative qualities (less than, fewer than, the
least). It tells us that young Anglo children use by as a
cover preposition and that there is no immediate need for
him to produce all the other related forms even though you
may want him to comprehend all the forms in the preposition
lessons. It tells us that children can handle conditionals
if they are taught as yes/no questions (Is it green? Then
cross the street.) or as when clauses (When it's green,
cross the street.) so that conditionals can be taught grad-
ually, leaving the more complex forms until these have been
"mastered."

To follow this advice to the letter would, of course,
mean scrapping most ESL materials and organizing our own

sequence of lessons. While ESL teachers are known to be handy, creative, hard-working and all other good things, no one can do such a job alone. We have to rely on writers and materials development teams to do that. But every teacher, looking over a unit, can decide for herself which of the structures presented should be taught now for comprehension or for production, how many of the items in a paradigm of structures are crucial for communication at this age level, and what the level of mastery for these crucial items must be.

An honest reappraisal of the literature will make us realize that what the linguist means when he says that the child of five has mastered his language is quite different from what we as teachers mean when we expect our students to master a structure. This misunderstanding has led us to expect elementary school ESL learners to master structures even when there is no evidence that the Anglo child has mastered them. It is, therefore, important that more information on first language acquisition be made available to teachers and to writers of ESL materials so that developmental levels as well as contrastive analysis can be considered in sequencing materials. It also will give us a chance to re-evaluate our teaching and the child's progress more realistically so that we do not end up the year completely discouraged about the young ESL child's learning abilities and our own teaching.

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THREE BOOKS ON LANGUAGE ACQUISITION

by Evelyn Hatch

Carol Chomsky, THE ACQUISITION OF SYNTAX IN CHILDREN
      FROM 5 TO 10, MIT Press, 1969.
Paula Menyuk, SENTENCES CHILDREN USE, MIT Press, 1969.
Lois M. Bloom, LANGUAGE DEVELOPMENT: FORM AND FUNCTION
      IN EMERGING GRAMMARS, MIT Press, 1970.

These three books, all from MIT Press, exemplify three
different approaches to the study of child language. Chom-
sky's ACQUISITION OF SYNTAX contains reports on four exper-
imental studies. In each experiment the child's ability to
comprehend a different syntactic structure was tested. SEN-
TENCES CHILDREN USE is based on both observational and ex-
perimental data. Menyuk is not, however, interested in
listing sentences that young children can or cannot produce.
Rather, she describes in transformational grammar terms,
the child's ability to form sentences from what she calls
base structure rules and his growing ability to use a wide
variety of transformations. Bloom's work, LANGUAGE DEVEL-
OPMENT, is based on both linguistic and extralinguistic
observational data. Aside from a description of the form
of child language, she wants to know what the child means
when he chooses to use various language forms. The addi-
tional behavioral and semantic information allows her to
suggest reasons for the development of varying syntactic
forms.

Summaries of the three books follow.

Carol Chomsky, THE ACQUISITION OF SYNTAX IN CHILDREN
      FROM 5 TO 10, MIT Press, 1969.

This study tests the child's comprehension of four
syntactic structures. The children tested were forty chil-
dren of middle socioeconomic class enrolled in kindergarten
through fourth grades in an Eastern school. The structures
tested involved pronoun reference and recognition of sub-
ject and object in complex sentences (with infinitives).

The four structures tested were:
1. John is easy to see, (Subject of sentence, object of see.)
2. John promised Bill to go. (Subject of go.)
3. John asked Bill what to do. (Subject of do.)
4. He knew that John would win the race. (Pronoun reference.)

In experiment one, the child was presented with a blindfolded doll and asked, "Is this doll easy to see or hard to see?" to test whether the child knew the correct subject of the sentence and object of see. If the child replied "easy," the investigator asked him to make it hard to see. The child usually responded by hiding the doll under the table. If the child replied, "hard," he was asked to make it easy to see. In this case, the child usually removed the blindfold from the doll.

In experiment two, the child was given figures of Donald Duck and Bozo and responded to test sentences like "Bozo tells Donald to hop up and down. Make him do it." vs. "Bozo promised Donald to turn a somersault. Make him do it." Comprehension of the subject in each case requires the child to use the appropriate figure in response to the command.

In experiment three, the investigator hoped to find out whether children could assign correct subjects to the following sentences:

1. Tell X what to feed the doll. (What he should feed the doll.)
2. Ask X what to feed the doll. (What you should feed the doll.)

In this experiment, two children were tested at a time. Unfortunately, when the experimenter gave the instruction "Ask Joe what to feed the doll," the first child immediately replied, "the tomato." It was obvious that the task was too difficult for all the children. Given simpler sentences such as "Ask Joe his last name," the child immediately responded with his own last name. The children did not mix up ask and tell, they simply interpreted both as tell.

Experiment four tested the child's comprehension of pronoun reference. Test sentences such as "Pluto thinks he knows everything. Who knows everything?" and "After

he got the candy, Mickey left. Who got the candy? "Who left?" were used.

Findings showed considerable variation in the age of children who responded accurately in experiments one, two and three. The structures in one and two seemed to be comprehended between ages 5.6 and 9, and were known by all children over 9. Children did not give evidence of comprehension of the structure in three by age 10. The structure in four was responded to accurately at age 5.6.

Theoretical arguments and the derivations for each sentence type occupy the first part of the book. Sample data from some of the subjects is also included. While the title of the book includes the work <u>acquisition</u>, it should be noted that the experiments test comprehension of the structures; it is not concerned with whether or not the child can produce such sentences.

Paula Menyuk, SENTENCES CHILDREN USE, MIT Press, 1969.

Menyuk describes in five general hypotheses the procedures the young child follows in producing the large variety of sentences that he uses.

1. He acquires some rules to understand and reproduce sentences.
2. Using the rules of his grammar he samples the utterances and by some matching procedures he determines the structural description of the utterance.
3. Using the rules of his grammar he generates the utterance but sometimes does not complete the order of rules needed to generate the completely well-formed structure.
4. He stores the rules of his grammar but only has enough computing space or memory to store a subset of the rules of the grammar of his language.
5. The set of rules of his grammar is expanded when computing space increases (number of rules increases) and when computing space is recognized (additional restrictions, types of properties of lexical items, types of operations). (p. 155)

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The data used to form these hypotheses is from a set of experiments with children age 2 to 7, both normal children and children using deviant speech. In none of the experiments was sex or IQ of the subject significantly correlated with the number or variety of structures used. That is, girls did not produce more or more varied structures than boys, nor did children with IQ's above the mean perform differently from those with IQ's below the mean. Age was the only significant variable.

All children formed sentences from basic phrase structure rules and showed evidence of acquired morphological rules. Variations were noted and described in three categories: 1) "Nonexpansion of symbol" (That is ommission such as "Mark a good boy."); 2) "Conflict with selectional restrictions and violation of strict subcategorization rules." (These are class or subclass substitutions, as in "He's a big train." "My daddy takes a shave every day." "These grass." "He took me at the circus."); and 3) "Overexpansion of a symbol" (redundancy, as in "She put on the dress on.")

While children did use well-formed base structure, some transformational rules were lacking. Others were produced in well-formed base structures part of the time and as more or less gross approximations to the rule at other times. Some of the more interesting examples were such sentences as "We've got to pasting." "She cooks and goes to shopping." "I like do it." "I want draw it." where verb constraints placed on the verb complement were not applied.

WH-questions frequently were incompletely formed. For example, the auxiliary was omitted ("How you take it out?"). Or the auxiliary was not inverted ("What you are writing?") or both the auxiliary and the verb were inverted ("Where could be the shopping place?"). Tense was occasionally duplicated ("What does this does?"), and double auxiliary occurred ("Is that's a belt?").

Comparisons are also made between normal three year old speech and that of a limited number of children with deviant speech. An example shows:

Normal-speaking 3.0	Deviant-speaking 3.0
Do you see it over there?	Which mine?
I want the fire engine to talk.	He's gots there.
He's going up the ladder.	I go wash hands.
There's a fire and here's the ladder.	My like gun.

Omissions account for the largest number of differences in the speech pattern of the two groups. Menyuk tentatively hypothesized that the problem lies in short-term memory capacity and/or the perceptual devices that the deviant-speaking child uses.

Throughout the book, the author points out areas where further research is needed. She also notes that a systematic comparison of the use of language by normal children and children whose language usage deviates from the norm might lead to "a better understanding of the correlations between language use and the psychological functions which underlie this use."

Lois M. Bloom, LANGUAGE DEVELOPMENT: FORM AND FUNCTION
    IN EMERGING GRAMMARS, MIT PRESS, 1970.

Of the three books reviewed, Bloom's study is the most concerned with how children develop and use language. The data on which she bases her arguments are observational. Superficially, the study is similar to that of the Brown group: 1) Data was obtained from three subjects (Kathryn, Gia and Eric). 2) Data was obtained in the home for approximately eight hours every six weeks beginning at nineteen months of age while the child played with toys, dressed, ate etc. 3) The data collected was divided into stages according to mean morpheme length of utterance. 4) The child's grammar at each stage was described.

There are, however, important differences from previous studies in that nonlinguistic information from context and behavior were also recorded in detail in order to make semantic interpretation of utterances possible. This is an important difference because when information on semantic correlates is considered, it is possible to postulate underlying motivation for the development of syntactic forms.

While there were important similarities in the data of the three children observed, there were even more interesting differences in the strategies used in forming their earliest grammars. Eric's first utterances were

describable in terms which Braine and others have called
"pivot grammar." A small class of pivot words occurred
with a large class of x words--x words give lexical content
and pivot words functioned as syntactic operators (e.g.,
"no pocket," "here mommy," "this button," "more noise").
Relationships between constitutents could be described as
linear and could be explained on the basis of the surface
structure. Verb-object strings ("see rabbit," "make pee,"
"eating cereal") appeared first and were highly productive;
subject-verb strings did not occur in Eric's speech until
late and were only marginally productive ("man cry," "I
get down."). This is contrary to Leopold's findings where
his bilingual subject began with subject-verb, then subject-
object, and finally verb-object.

The data for Kathryn and Gia could not be explained by
pivot grammar. Hierarchal relationships were obviously
necessary. While subject-verb-object strings were not pro-
duced during stages I to III, they were postulated as the
underlying structure to account for different semantic in-
terpretations of two-word utterances. This was done by a
reduction transformation.

The use of a reduction transformation process in lan-
guage acquisition is in direct contrast to the usual notion
that increasing structural complexity is made possible by
adding structure to structure. For example, when the child
has the rules:

(a)   (b)

That My   Coat   Want   That Coat
      Adam   Adam
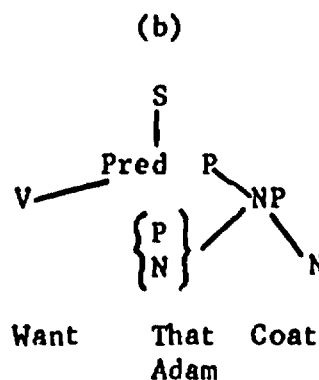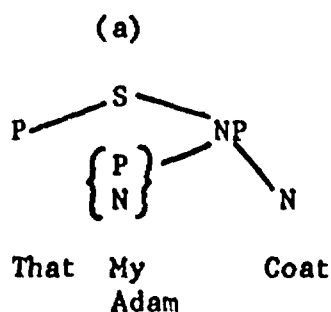
McNeill claims that "all the child lacks is simultaneous
application of both rules" in order to generate a single
sentence. Bloom, on the other hand, postulates that the
child has a rule:
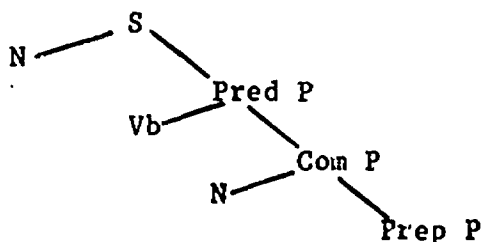
The nodes, of course, are not all filled in by the child
at this early stage because of sentence length constraints.
When the subject is expressed, either the verb, the object,
the adverbial phrase or more than one of these is not ex-
pressed. A series of reductions account for sentences pro-
duced like:

Kathryn under bridge.	(N-∅-∅-Prep P)
Kathryn make under bridge.	(N-V-∅-Prep P)
Make more under bridge.	(∅-Vb-N-Prep P)
Make car under bridge.	(∅-Vb-N-Prep P)

Using the extralinguistic information about the context and
the behavior of the child at the time of the utterance
allows Bloom to account for such a sentence as "Kathryn un-
der bridge," when Kathryn is not under the bridge but rather
putting a toy underneath the bridge. The record might look
something like:

Description	Kathryn's utterance
(E pushed the train under the bridge;	
E picked up the truck.)	
Let's make the truck--	no make a truck.
No make a truck?	a bridge.
(E pushing train under)	under bridge.
Who's going to go under the bridge? I know who's going under the bridge. (K holding lamb)	this under bridge.
What is this?	lamb.
Let's make him go under the bridge. (K taking lamb to bridge)	Kathryn under bridge.

The behavioral description gives us the meaning of the sentence "Kathryn under bridge," and the sentence rules and reduction transformation gives us the form of the utterance.

The semantic and syntactic development of negation by the three children is also discussed in depth. The semantic categories discussed are denial, rejection and nonexistence. On the basis of frequency of occurence and progressive development, the order of acquisition was the same for all three children: nonexistence, rejection and denial. This agrees with the McNeill and McNeill study on negation, except that their Japanese subject also constrasted correctness of statements at first as well as nonexistence of objects and events.

The syntactic forms of negation are similar to those found in Phase A and B in the Brown study (Bellugi-Klima, 1967). Differences in forms used by each of the three children in the three phases is described in depth. While markers varied from child to child over the three phases, all three used "not" to signal denial; "don't" to signal rejection, and wider variety of markers (can't, don't, not, no) for nonexistence.

The final chapter of this book is a summary discussion of language acquisition, strategies for learning language, methodology in the study of language acquisition, and inadequacy of pivot grammars as first grammars. A model for language development is postulated which specifies "at least three interrelated components: linguistic experience, nonlinguistic experience, and cognitive perceptual organization." Overlap of the three would represent what the child knows about language.

While many transformational grammarians have made strong claims for the child's learning of language in the fourth year, Bloom is in the growing group of investigators who believe that such "learning" continues well into the school years. Her model tries to explain how this comes about. She sees the study of the child's use of linguistic structures as the most promising field for linguistic research. "Using the structure and knowing the structure can be two different aspects of language competence"; both should be proper areas for linguistic inquiry.

INFORMATION EXCHANGE: Reports and Reviews

   A.   Bilingualism

   B.   Contrastive Analysis

   C.   Indian Languages

BIA PROJECTS

ESL HELP FOR TEACHERS IN THE NAVAJO AREA

Helping the New Teachers

Approximately two hundred new teachers were hired in
the fall of 1969 to serve in BIA schools in the Navajo Area.
Some were novices to the profession, recently graduated
from a college or university; some had years of experience.
But few were familiar with the specific needs and problems
of Navajo pupils. To any newcomer to Navajoland, the vast-
ness and isolation of the area, the contact with a very dif-
ferent language and culture are startling enough. But the
elementary teachers assigned to a self-contained classroom
and the language arts people of departmentalized upper lev-
els were also told that they were expected to teach "ESL."
Their first reaction was predictable: "What is it?"

The most generally used ESL text in BIA schools is the
Fries-Rojas American English Series. Teachers who have no
background and training find the texts different from con-
ventional (non-ESL) materials and are obliged to rely on
help from experienced teachers and supervisors.

There are veteran teachers who have been trained in
ESL and have developed their own effective, coherent les-
sons for each step of the sequency. They have collected
techniques, games and visual aids for each presentation.
Also, some specialists and supervisors have had special
instruction in lesson planning and observation and are well-
informed in the theoretical backgrounds of linguistics,
psychology, testing, etc. These people take the novices in
hand and help them with demonstrations, and provide time to
observe the experienced teacher across the hall, to view a
film, etc. Each agency has assumed the responsibility for
training its own novice teachers in ESL at the grass roots
level.

In addition, an outside consultant, Dr. Gina P. Harvey
of the University of New Mexico, is spending one or more
days of each week in the schools, observing, demonstrating,

offering encouragement, help, and advice. Her assignment
began November 1969. So far she has been able to work with
new teachers at seventeen schools. In each location she
usually gives a demonstration and discusses how to inter-
pret the text, and how to write a lesson plan, from behav-
iorally stated objectives to testing. A very important
session is devoted to explaining the scope and sequence of
the ESL program and clarifying its relevance to the spe-
cial needs of Navajo children. There is always a question
and answer period. Next year several of the 1969 novices
will be teaching ESL for the second time around and sharing
the results of their training and experience with the re-
cruits of 1970.

Helping Teachers At The Upper Elementary And
High School Level

Teachers of foreign and second languages (including
English) have now available a fairly wide choice of mate-
rials geared to students of different ages and backgrounds.
Most of the materials, however, do not go beyond an elemen-
tary level of proficiency. Even if they do, they often
seem to become less organized, less interesting, and gener-
ally less effective at the intermediate and advanced level.
Similarly, most teacher training programs, in-service or
otherwise, with their emphasis on oral practice and pattern
drill, have been relevant to teachers of beginning students,
leaving others to their own devices. After all, the elemen-
tary level constituted the necessary foundation for devel-
oping the subsequent levels. But while the theoretical
focus rests on the beginning student, teachers in class-
rooms everywhere have to go on teaching beyond elementary
patterns. They have to cope with the needs of learners who
can function in the target language but haven't reached
native-like fluency.

An interesting example of the situation outlined above
and how it can be handled in BIA Schools is found on the
Navajo Reservation, where ESL is being taught with some
success at the lower elementary levels (including some re-
markable experimental projects). But there are many stu-
dents in the upper elementary grades and the high schools,
those who were in the lower grades before the ESL programs
became established Area-wide, who have mastered enough Eng-
lish for every day communication but not for some academic
tasks. These students also need specialized and systematic
help.

Dr. W. J. Benham, who is in charge of the educational program for the Navajo Area, has turned his attention to the needs of teachers of upper levels by making available to them up-to-date professional information and whatever materials can be found. These teachers, often highly motivated and willing to learn, have been reluctant to spend time and effort on the usual ESL training which was not relevant to their students.

First of all, last summer (June, 1969), a workshop was organized at Brigham City, Utah, for the purpose of examining all commercially available materials for teaching ESL at the intermediate and secondary levels and of acquainting teachers with materials suitable as supplements.

Many other relevant materials (remedial reading programs, readers, controlled composition texts, spelling programs and outstanding language arts texts not designed specifically for ESL) were also examined by the committee for the purpose of disseminating the information to interested schools.

The results of the summer workshop, plus TESOL pedagogy adapted for intermediate and secondary students, are being made available to interested BIA teachers in a series of courses conducted on the Reservation by Dr. G. P. Harvey. The project is funded under Title I, 89-10, and participating teachers receive credit from the University of New Mexico. Classes met once a week for seven weeks in each of the five Navajo Agencies; teachers come from a fifty-mile radius. Outside consultants have also invited to lecture to the teachers.

The program stresses the creative aspect of language and is concerned with reading and writing as well as with oral work.

Dr. Gina P. Harvey
Farmington,
New Mexico

NAVAJO KINDERGARTEN

Bilingual-bicultural first grade classrooms have been
instituted in four BIA schools in the Navajo Area for 1970-
1971. These classes are an extension of the bilingual-
bicultural kindergarten program introduced in the same
schools in 1969. (See Spring, 1970 EFAI issue.)

This BIA bilingual program was planned under the di-
rection of Thomas R. Hopkins, BIA Chief of Curriculum Devel-
opment and Review and is now being supervised by Faralee
Spell, Area Chief of Curriculum and Instruction, and Mary
Ross, Education Specialist, of the Area Division of Educa-
tion. The development of instructional materials has been
contracted to Dr. Muriel Saville of the University of Texas
of Austin.

The Navajo language is used exclusively at the begin-
ning of the kindergarten year, with English added as a
second language. While a steadily increasing portion of
the school program is conducted in English at the first
grade level, initial reading and writing skills are taught
only in Navajo. The Navajo language continues to be used
as a medium for furthering the development of concepts re-
lating to the students' environment and in creative lin-
guistic and aesthetic expression. English is used for
mathematics and for some of the science instruction. Eng-
lish competence is to be developed during the first grade
year to a level of reading readiness in that language.

All of the kindergarten and first grade teachers and
aides in bilingual classrooms are native speakers of Navajo.
In-service training has emphasized reading and writing the
Navajo language and included methods for teaching reading,
mathematics, and English as a second language. In addition
to the regular staff, William Morgan and Beatrice Estrada
have contributed heavily to the training program.

Bilingual guidelines and materials for the kindergar-
ten have been revised and will soon be available to inter-
ested schools and individuals. First grade materials will
be completed and tested by the summer of 1971.

Muriel Saville, University of Texas

THE DEMONSTRATION SCHOOL AT ROUGH ROCK

One of the first and most influential of the experi-
mental programs on the Navajo is the Demonstration School
at Rough Rock, Arizona. It is still considered to be one
of the most innovative bilingual programs in operation.
Since its beginning in September, 1966, when it was opened
with six grades and a pre-school class, it has increased to
nine grades and has a population of over four hundred chil-
dren who come from the area immediately around Rough Rock.

While ESL is an important element of the program, there
has been increasing emphasis on the use of oral Navajo for
the younger children. Navajo nas now become the main lan-
guage of instruction for grades K through two (Phase I).
They receive four hours of spoken and written Navajo and
two hours of spoken English. Grades three through nine
(Phase II) are given two hours of spoken and written Navajo
and four hours of spoken and written English.

A significant innovation in this school is the seven-
man all-Navajo school board in which is vested the decision-
making authority for the school program and for its policy.
This involvement of the community is extended to the dor-
mitories, where teams of parents "live in" for several days,
so that sometime during the year, every child has a close
relative visiting the dorms. Also the elders and artisans
of the community are invited to participate in the contin-
uing program of Navajo culture and history by contributing
lessons in their skills, such as weaving or storytelling.

In the fall of 1969, a major evaluation was begun by
Dr. Luis Bernadoni from the University of New Mexico. Control
schools will be used, and measurements will be made of such
things as achievement in both English and Navajo, attitudes
toward Navajos, acculturation, changes in occupational values
and choices, self-concept, and attitudes toward the school.

Resource people from many universities across the
country have been called upon as consultants. The project
is supported by funds from the BIA, OEO, and HEW.
(Abstracted from The Center Forum, Center for Urban Educa-
tion, Vol. 4, No. 1, p. 20, September, 1969)

DINE BIOLTA ASSOCIATION TEACHER TRAINING WORKSHOP

For the first time in the history of Navajo education a teacher training workshop is being conducted on the Navajo Reservation with a Navajo director and Navajo instructors. All participants are Navajo teachers or teacher assistants who will be teaching Navajo youngsters in the school year 1970-1971.

The participants are engaged in the preparation of curriculum materials in the areas of Navajo music, culture, linguistics, arts and crafts and language arts for the primary age children. These materials are written in Navajo script, as well as in English.

The instructors and Navajo consultants have been using the Navajo language as the medium of instruction and discussion. This experience alone, has created a personal sense of ego security and identity as well as a reinforcement and enrichment of one's culture.

Non-English speaking consultants have been working with the instructors and participants in discussion and demonstration of special aspects of Navajo culture.

University professors who have worked with Navajo people were invited to discuss theories regarding linguistics, thinking, teacher training, curriculum development, bilingual education, identity, music and cross-cultural relations.

Mrs. Anita Bradley Pfeiffer
Director

Editor's note: The Dine Biolta (Navajo Education) Association Teacher Training Workshop was held at Hunters Point Boarding School, St. Michaels, Arizona, June 15 to July 25, 1970. It was the beginning of a three-year Curriculum Development Project for Training Navajo Teachers in Navajo Culture and Linguistics. It consisted of five instructors and forty teachers from BIA, public, and Navajo schools who will continue to share information and evaluation during the school year.

ESKIMO-ENGLISH BILINGUAL PROGRAM,
BETHEL AGENCY, ALASKA

Many Alaskan natives have wondered over the years why
their language was not available to them in the school.
Fortunately, starting this September in three villages, a
bilingual Eskimo-English program became a reality. The
program had its genesis from a number of individuals and
groups but suffice it to say at this point, the Eskimo
people of the three villages are excited about the program.

The Yuk dialect of the Kuskokwim and Yukon River re-
gions is the language being used. The Alaska Rural School
Project of the Department of Education and the Linguistics
Department of the University of Alaska conducted the teacher
and teacher aide training programs this summer. It was
during this workshop that the formal aspects of the Eskimo
language were taught and curriculum materials were prepared.
Irene Reed of the Linguistics Department of the University
of Alaska, who has been studying the dialect for ten years,
performed yeoman service in helping with the technical as-
pects of the two-language curriculum. Pedagogical content
has been handled by the University and by the Juneau Area
Education staff of the BIA. The program is being funded
under the auspices of Title I of the ESEA legislation.

One pleasing part of the Alaska program, and all other
bilingual projects that the BIA has helped with in recent
years, is the bringing together of the educationists and
the linguistists in common purpose, to improve the quality
of education for Indian and Alaskan Native children. Addi-
tionally a profound revelation to the Indian and Eskimo
peoples has been associated with the silent message carried
in a bilingual program. One no longer has to preach the
value of native languages in these villages; the bilingual
program is a loud and positive example which accords dignity
and worth to the Eskimo language.

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BIA CURRICULUM BULLETIN NO. 4:

English for American Indians

The recently issued Curriculum Bulletin No. 4 of the
BIA is a compilation of selected articles from the first
three issues of English for American Indians: A Newsletter
of the Office of Education Programs (The three issues were
prepared by the Center for Applied Linguistics and edited
by Sirarpi Ohannessian). Through this single-volume col-
lection, the material will receive wider circulation and
will be more readily available to the new classroom teacher
and those in charge of in-service workshops.

The articles included are: "Language Drill and Young
Children," by Muriel Saville; "Beginning School in a Second
Language," by Lois McIntosh; and "Breaking Down Your Writing
Goals," by Gerald Dykstra. Each article is followed by a
bibliography compiled by Carol J. Kreidler.

Copies are available on request from the Office of
Education Programs, BIA, Washington, D. C.

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BILINGUAL PROJECTS UNDER TITLE VII

Title VII of the Elementary and Secondary Education
Act of 1965, known as the "Bilingual Education Act," was
enacted January 2, 1968. Its purpose is defined as follows:

> [to] provide financial assistance to local educational
> agencies to develop and carry out new and imaginative
> elementary and secondary school programs designed to
> meet the special educational needs...[of] children
> who come from environments where the dominant language
> is other than English. (Sec. 702)

It is the intent of the Bilingual Program Branch of the
U.S. Office of Education, which works closely with local
administrators, that the projects should be "truly bilin-
gual" in the sense that the child's dominant language will
be used as the medium of instruction until he has acquired
enough FSL structures and vocabulary to begin learning in
English.

Among the first seventy proposals accepted under Title
VII, only three were for projects concerned with American
Indians. These were for Cherokee at Tahlequah, Oklahoma;
American Indian and Spanish at Grants, New Mexico; and Nava-
jo at Blanding, Utah. Other grants have since been made
for the year 1970-71. The following reports are on both
new and continuing projects.

SAN JUAN SCHOOL DISTRICT, BLANDING, UTAH

This program for Navajo children was piloted last year
in pre-school and first grade at three schools in the San
Juan School District in which the Indian students comprised
65 to 95 percent of the school population. Teacher train-
ing, under the supervision of Mr. Lynn Lee, Coordinator of
Indian Education, consisted of a summer workshop conducted
by consultants from Brigham Young University and emphasized
the planning and conducting of lessons by two cooperating
teachers in the same classroom, each teaching in a separate

language. Further, workshops were held during the year for evaluation and for sharing of teacher-developed materials.

Some of their main objectives as outlined in a <u>Bilingual Handbook</u>, compiled by Dr. Ruel Allred of B.Y.U. may be stated briefly as:

1) Content mastery of subject matter areas to be undertaken in the native language of the child according to the regular public school time sequence.

2) The non-target population should behave in a manner supportive to the improvement of the target individuals' self-concept.

3) Parents of the target population to be helped to understand, support, and modify the curriculum.

4) Curriculum development should, among other things, develop learning activities related to the "real world" and the native language of the target population.

The project has made use of materials already available such as the Oral Language Program of the Southwestern Cooperative Educational Laboratory in Albuquerque for ESL. Other materials were adapted for the bilingual student by preparing tapes in Navajo to accompany commercial filmstrips, such as "Indian Ceremonies, 'Care of Teeth," etc. Other tapes such as "Coyote Stories," have been made to accompany teacher-made posters; and tapes made for small group participation and self-instruction games have been successfully used. They have also had access to materials sponsored by the Navajo Office of Economic Opportunity.

An evaluation and progress report is being prepared by Dr. Milford Cottrell of B.Y.U., and will be ready this fall.

SCHOOL DISTRICT 17-H, HARDIN, MONTANA

The Montana grant is for a project on three reservations, Crow, Rocky Boy, and Northern Cheyenne. The major pilot program will be at the Crow Agency this year, with a

one-class program at Rocky Boy, and with the Cheyenne phase
in the organizational stage. A report by Director John
Dracon of a recent survey indicates that Crow is the domi-
nant language of 82 percent of the children at the Crow
Agency; Cheyenne is the dominant language of 55 percent of
the Northern Cheyenne; and the Rocky Boy people wish to pro-
mote and revive the Cree language and cultural aspects of
the program. The schools are all public schools with the
exception of one B.I.A. school on the Northern Cheyenne.

The pilot project at the Crow Agency will be composed
of all three first-grade classrooms and one classroom of
the most able Head Start five-year-olds. There will be in
each class native Crow speakers, non-Crow speaking Indians,
and non-Indian children. Each classroom will have a Mon-
tana state certified elementary teacher and a Crow Indian
aide who is competent in Crow language and culture. Their
training will be done in summer and in-service workshops,
including one on the Crow language which will be supervised
by the most able Crow speakers as identified by the Crow
Tribe themselves.

Instruction in many academic areas will be done in a
situation where the child can explore a wide range of ideas
and interests, and the language used will be in "direct re-
sponse to the language initiated by the child." Most in-
struction will be in the dominant language of the child,
but bilingual-bicultural situations will encourage develop-
ment in the non-dominant language. While a Crow orthography
is being developed by Ray Gordon, of the Summer Institute
of Linguistics, and Dale Ol. Horn, of the Crow Tribe, empha-
sis for the first year will necessessarily be on oral compe-
tency. (See SIL report, this issue.)

The first objective is an assessment of the proficien-
cy or deficiency in both the dominant and non-dominant lan-
guage through language performance studies. Grouping for
instruction will be based upon this language assessment. A
second objective is the cooperation of the parents in plan-
ning and carrying out of the program. A first step in this
direction is the compilation of a list of curriculum needs
as seen by the parents. Not yet ready for publication,
since only a small number of Crow people have been contacted
to find what they would like their children to learn, the
tentative list will be used as a basis for getting the opin-
ion of many more of the Crow people before the final list
is made.

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Objectives focused on the growth of the child will give
attention to: 1) contributions the child can make--vocal,
artistic, social, etc., 2) social adaptation to child-child
and adult-child relationships in which they will learn a
balance between group discipline and free expression, 3) de-
velopment of learning strategies and cognitive processes in
either of the languages and cultures.

"Curriculum development, method, and materials will be
in the hands of the teachers working with the parents and
the Indian community." (from "A Program for Bilingual-Bicul-
tural Indian Education in Montana," by Stephen and Rose Che-
sarek, Elnora A. Old Coyote, Joy Toineeta, and Dale Old
Horn.)

ADAIR AND MCCURTAIN COUNTIES OKLAHOMA

Funded for 1969-70, a project sponsored by Adair Coun-
ty and Northeastern State College at Tahlequah was directed
by Mr. Neil Morton at NSC. There were four pilot schools,
each having a high percentage of Cherokee children, all of
whom were substandard in Cherokee usage as well as in Eng-
lish. Some have no English. Each classroom had a bilingual
aide for the teacher. Training for the teachers and aides
was under the direction of NSC and consisted of 1) counsel-
ing for local teachers, 2) special techniques for working
with Cherokee children culturally and linguistically, and
3) Cherokee language offered for credit to prospective teach-
ers. There was a special coordinator to work with the par-
ents to interest them and explain the program. Materials
consisted of laboratory work with both languages, McGraw-
Hill's Let's Speak English, and other materials which are
being developed to apply to special problems of Cherokee
children. Three encouraging results after the first year
were increased attendance, lower dropout rate, and parents
demonstrating an active interest and cooperation.

Funded for 1970-71, a project sponsored for Choctaw
children is being sponsored by McCurtain County and South-
eastern State College at Durant. In both objectives and
implementation it is similar to the Cherokee program. Both

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programs hope for a five-year funding period, and both col-
leges have promised to continue to train teachers fcr as
long as is necessary. It is hoped that local Choctaws may
be encouraged to become teachers by changing the approach
to educational programs in college.

The objectives of both programs are: 1) immediate help
to children, 2) long-range help to all Indian children in
Oklahoma, and 3) keeping the children in school "so that
they may realize their full potentialities as citizens of
our state and nation." (from Mrs. Patricia Hammon, Curricu-
lum Specialist for Foreign Languages, Oklahoma State Depart-
ment of Education.)

PROJECT SUN, CORTEZ, COLORADO

The Southwest Board of Cooperative Services, Dr. Robert
Werner, Director, chose for their project the six elementary
schools which had particularly high enrollments of Ute
Mountain Ute, Navajo, and Spanish-American kindergarten
children. The classrooms have varying combinations of the
four ethnic groups (including Anglos), but all represent a
multi-cultural, multi-lingual combination of rural disadvan-
taged and advantaged children.

A survey conducted May 15, 1970, to obtain teacher es-
timates of Ute, Spanish, and Navajo competence in English
at kindergarten level and overall school performance indi-
cated, as might be expected, that the Anglo child is consid-
erably more competent upon entrance, and that performance
of the others becomes consistently poorer as they advance
through school. Part of the objectives of the project is
to obtain valid baseline data and determine basic competen-
cies in the languages concerned.

Their first year objectives are to develop speaking
and listening skills in English and the vernaculars and
writing skills in English. (John Green, SIL linguist, is
translating English into Ute for the purposes of developing
a reading primer.)

Their first year objectives will vary somewhat according
to the dominant language of the student. However, they are
broadly defined as follows: 1) to speak and write the stan-

dard variant of English at grade level in addition to main-
taining their native languages; 2) to perform at grade
level in content areas; and 3) to have monolingual speakers
of English voluntarily learn enough Spanish to communicate
in every day situations.

The objectives are expected to be achieved by: 1) bi-
lingual and ESL language instruction, 2) material modifi-
cation and development, 3) staff development and training,
and 4) community participation. (taken from an "Abstract,"
provided by Noe E. Coto, Supervisor and Coordinator, Title
VII Project Sun.)

DISTRICT I, STATE OPERATED SCHOOLS
ANCHORAGE, ALASKA

The target group in this project is Eskimo children of
southwestern Alaska whose native language is Yuk. Early
instruction will be in Eskimo (Yuk), with English being
taught as a second language. All subjects will be taught
in both languages, and it is expected that the children
will become literate in both.

The project, planned for 179 kindergarten and first
grade children, will begin in one pilot classroom and will
be expanded as planning and teacher and aide training are
completed.

First year objectives include "oral competence in both
languages, some literacy,..." and frequent participation
and support by parents as resource people in historical
background, legends, etc.

(Abstracted from information supplied by Margaret
Moore, BEPB, U.S. Office of Education.)

The addendum information for the Title VII articles was
requested and supplied by the U. S. Office of Education.

ADDENDUM FOR SECTION ON BILINGUAL PROJECTS
UNDER TITLE VII

Page 31, paragraph 2, line 5:

be used as the medium of instruction while he is acquiring
the language skills in English, after which both languages
will be used as media of instruction. In addition, the child
will be instructed in the language skills of his dominant
language as well as those of English.

Paragraph 3:

Among the first 76 proposals accepted under Title VII,
five were for projects concerned with American Indians.
Nine projects, of the 131 projects currently funded, involve
one or more American Indian or Eskimo groups, and
instruction is taking place in seven Indian languages and in
Yuk, an Eskimo language. Where writing systems do not
presently exist, they are being developed, and curricula
employing the Indian and Eskimo languages are being
prepared to further the education of the children in the
history, culture, and heritage of the Indian and Eskimo
peoples and in other areas where appropriate.

Page 34, title and line 1:

Adair County should be changed to Cherokee County.

Page 36:

According to information just recieved, the Alaska project is
serving 50 kindergarten children only.

A HANDBOOK ON BILINGUAL EDUCATION

by Muriel Saville and Rudolph C. Troike

Although much basic research must yet be done in the
fields related to bilingual education--linguistics, psy-
chology, child language acquisition, etc.--those involved
in designing bilingual situations are faced with the imme-
diate necessity of setting up new programs, making use of
whatever information is currently available. This document,
therefore, was commissioned by the Center for Applied Lin-
guistics to answer some of the questions of educators who
are becoming involved in bilingual programs for the first
time. The authors give warning that with further experi-
ence and investigation, answers may change; and they ex-
press the hope that educators will be ready to adapt their
content and methods as new findings become available.

Despite the disclaimers, the authors have made a sig-
nificant contribution to bilingual education. The handbook
carefully examines, defines, describes, and gives answers
to many of the perplexing aspects of preparing a good bi-
lingual program. The areas considered were chosen because
of their "immediate relevance to teaching." There are six
chapters in the handbook, each of which is summarized below:

Chapter One begins with a statement of the problem.
Past methods of teaching English have proved ineffective
for the child who comes to school speaking another lan-
guage, and he may never catch up with those who speak Eng-
lish natively. Terms are defined; and some fundamental con-
siderations are pointed out for starting a program such as:
What is language? How does a child learn his native lan-
guage? What are some of the possible repercussions from
being bilingual?

Chapter Two discusses the rationale in terms of lin-
guistic factors, psychological factors, and social and cul-
tural factors.

Chapter Three offers aids in program design. The
chapter includes the beginning phases such as details of
planning a bilingual program are discussed, placing re-

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sponsibility for the initiation of a program, and descrip-
tion of several different kinds of programs from which to
choose.

Chapter Four considers the language of instruction.
From the presentation of a system of phonological nota-
tion through an explanation of grammatical systems and lex-
icon, this chapter uses Navajo and Spanish to point up the
importance of contrastive linguistics.

Chapter Five includes pedagogical considerations. Items
such as procedures in the teacher-child relationship, con-
tent of the curriculum, methods of language teaching, and
practical teaching suggestions (with examples) in phonology,
syntax, and lexicon make this an important chapter to the
teacher or administrator who is involved for the first time
in bilingual education.

Chapter Six stresses evaluation. The importance of
pre-testing as well as post-testing in both languages, items
for adaptation of standard tests, and how to test without
standardized tests are discussed. A sample questionnaire
for testing home conditions, problems of I.Q. testing, are
included with hints on testing procedures.

(Copies are available from ERIC Reproduction Service.
For instructions on ordering, see this newsletter, Spring
1970.

BILINGUAL EDUCATION: A Special Report from CAL/ERIC

The May 1970, issue of Elementary English, published
by the National Council of Teachers of English, contains a
special report on the documents on bilingualism and bilin-
gual education which were processed by ERIC between January
1966 and December 1969. (See ERIC report in this newsletter,
Spring, 1970.)

A. Hood Roberts, who is Director of the ERIC Clearing
House for Linguistics at the Center for Applied Linguistics,
and Mrs. Anna Maria Malkoc, a subject matter specialist at
the CAL, have compiled a list of what they consider to be
the most representative of these documents to acquaint re-
searchers, teachers and administrators with the most signi-
ficant materials now available in bilingual education.

Their report contains a list of some forty-four items,
most of them carefully and generously annotated, on the
following topics:

> 1) General bilingual education
> 2) Mexican-Americans
> 3) American Indians
> 4) Other ethnic groups
> 5) Tests
> 6) Bibliographies and references

Included is an invitation for teachers to submit copies
of their materials to the Clearinghouse for possible inclu-
sion in the ERIC system. Such materials should be addressed
to the ERIC Clearinghouse for Linguistics, Center for Applied
Linguistics, 1717 Massachusetts Avenue, N. W., Washington,
D. C. 20036.

DESCRIPTION AND MEASUREMENT OF BILINGUALISM
DESCRIPTION ET M^SURE DU BILINGUISME

edited by L. G. Kelly

This volume is essentially a report of an international seminar on bilingualism, which was held in June 1967, at the University of Moncton in Canada, sponsored jointly by that University and the Canadian National Commission for UNESCO. Invited were linguists, psychologists, and sociologists from many countries, including, in addition to United States and Canadian scholors, distinguished researchers from Belguim, Japan, France, Wales, Switzerland, India, Germany, England, Eire, South Africa, the Netherlands, Finland, USSR, and Australia. Each of the six chapters represents a session of the seminar, with papers, commentaries, discussion, chairman's summary, and selected bibliography. Some of the material, as the title suggests, is given in both French and English versions. The volume concludes with a set of resolutions and a summary statement by W. F. Mackey.

Those who read the material in this report will find in it a welcome reminder that bilingualism is not a local but an international concern, and that we would do well to take advantage of the experience of others often much more extensive than our own, in planning new bilingual programs.

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A TYPOLOGY OF BILI JUAL EDUCATION

by William F. Mackey

This paper, which was prepared for a Research Conference on Bilingual Education held in June of 1969 under the auspices of the Bureau of Research of the United States Office of Education, has recently been printed in Volume Two of Bilingual Schooling in the United States (a new publication reviewed briefly in the present issue of the Newsletter). In the paper, Professor Mackey, who is Director of the International Center for Research on Bilingualism in Quebec, attempts to classify possible types of programs which might conceivably be considered under the heading of bilingual schooling. Since the term "bilingual school" has so many different meanings, such a classification--or typology--is essential, Mackey feels, if we are to engage in meaningful planning and measurement of bilingual education.

Mackey's classification is based on objective criteria, all of which are "observable and quantifiable," and all of which must be taken into account by those doing research on bilingualism. Basically, these criteria are concerned with patterns of distribution of the languages as they are used in the following contexts:

1. In the home.
2. In the school.
3. In the local area and in the wider community of which it is a part.

The status of the languages is also taken into account.

One of Mackey's chief concerns is the identification of curriculum patterns which specify in detail the role of the two languages in the school and their relation to the dominant language of the home. There are broadly two types of curricula: single-medium and dual medium. In single-medium schools, only one language is used "to transmit knowledge," although the other may be taught as a subject, much as French, let us say, is taught in high school in Los Angeles.

In dual-medium schools, both languages are used as media of instruction, but the pattern of distribution varies widely. Some of the general patterns might be summarized as follows:

1. The school begins with instruction in the dominant home language and gradually or abruptly transfers to a second language, often a language of wider communication. (For example, the child begins school in Navajo, and then at some point shifts completely to English, his second language.)
2. The school may maintain both languages for different subjects. (For example, mathematics would be taught in English, social studies in Navajo.)
3. The school may teach all subjects in both languages--"equal maintenance." (The American School in Guadalajara, Mexico, is so planned, where the children study the complete curriculum in both English and Spanish, spending half a school day in one language, half in the other.)

In his discussion to this point, Mackey makes extensive use of the following terms, some of which may be new to our readers:

1. Single-medium and dual-medium schools. These were defined above.
2. Language transfer (shifting from one language to the other) may be accultural (toward the new language) or irrendental (toward the dominant home language.) Language maintenance may be differential (with different subjects taught in the two languages) or equal (with all subjects taught in both languages.)

In the next section of the paper, Mackey considers the contexts (local and national) in which the languages being taught are actually used. Such considerations are vital, as Mackey points out, "since it is on the assumption of usage and consequent knowledge that the teaching is based." In examining language usage of the nation, the area, and the school, Mackey is able to define nine different contexts.

The fourth section of the paper is concerned with the languages themselves, for, as Mackey points out, this is "the component common to all types of bilingual programs

at all levels." Here are examined the various functions
of the languages in the home, the school, and the communi-
ty. This section also considers the international status
of the languages involved, whether they are languages of
wider communication (as English, Spanish, or French) or
local languages (as Navajo). Another question of consid-
erable importance for planners of bilingual programs is
treated briefly--that of dialect variation within the lan-
guages used. Already questions of dialect differences in
Spanish have been raised in many of our new bilingual pro-
grams involving that language. And Dr. Muriel Saville has
been increasingly aware of and interested in dialect varia-
tion in Navajo, a matter of some importance in preparing
literacy materials for kindergarten children and first
graders. Finally, Mackey considers the question of simi-
larity and difference--"distance"--between the languages
taught in school. This "distance" is a significant matter
in planning the rate at which some materials are introduced.
Language similarity (as between Spanish and Portuguese)
may make the transition from one language to another much
easier--at least at the level of understanding. On the
othe. hand, mistakes in speaking and writing may in certain
cases be increased because of the closeness of the two lan-
guages. Also important (surely of great concern in working
with American Indian languages) is the difference in "avail-
able cultural concepts." When the cultures are in striking
contrast, the curriculum planners must not only consider
the teaching of new language but of new ways of looking at
the world.

Mackey concludes his paper with the following state-
ment:

It is only after we have taken all the variables
into account and applied appropriate measures of them
that we can achieve any degree of certainty in our
planning in this important and complex field. Toward
this end it is hoped that this preliminary typology
may be of some help.

Those of us who have been involved in discussions on
bilingual education have often been frustrated because we
have recognized that the term is almost meaningless, or,
rather, that it has no commonly agreed to meaning. Mackey's
paper is a valuable first step in definition.

FOREIGN LANGUAGE ANNALS

Foreign Language Annals, edited by F. André Paquette, the official journal of the American Council on the Teaching of Foreign Languages (ACTFL), is issued four times a year. ESL teachers often overlook this publication as a source for professional enrichment.

Dedicated to all phases of foreign language teaching it provides currently significant information to teachers, educators, and researchers on all educational levels and on many languages. To serve this purpose effectively, the editors commission articles and invite papers to be submitted. In its special section, "ERIC Clearinghouse on the Teaching of Foreign Languages," there is a regular review of ERIC documents related to developments in foreign language teaching, many of which would be of interest to ESL teachers. For example, in the March, 1970, issue is a report on "Projects Under the New Bilingual Education Program," and a list of bilingual programs by states. In the same issue may be found a U. S. Office of Education list of State Coordinators of Bilingual Education Programs.

The May, 1970, issue includes a detailed report on handling of manuscripts, circulation, and sales of back issues. Subscriptions may be ordered from ACTFL, 62 Fifth Avenue, New York, N. Y. 10011; single copies, $2.00; annual subscription, $8.00.

STATEMENT ON BILINGUALISM

by A. Bruce Gaarder

In May of 1967, Dr. Bruce Gaarder of the Office of Education presented a statement on bilingualism to the Special Subcommittee on Bilingual Education of the Committee on Labor and Public Welfare, United State Senate. Because of the impact this statement has had on promoting new programs in this country, we have presented here a brief summary of his arguments in support of the bilingual approach. Limited space has made it necessary for us to condense or paraphrase the language of the original.

1) If English is the sole medium of instruction, the children are likely to become retarded in their school work to the extent to which they are deficient in English.

2) A strong, mutually reinforcing relationship between the home and the school make it necessary that the mother tongue be used by some of the teachers, and as a school language.

3) Language is the most important exteriorization of the self. Rejecting the mother tongue can be expected to affect seriously and adversely the child's concepts of his parents, his home, and of himself.

4) The child's unique potential career advantage, his bilingualism, will have been destroyed if he has not achieved reasonable literacy in his mother tongue. It will be almost useless for him for any technical or professional work where language matters.

5) Our people's native competence in other languages and the cultural heritage each language transmits are a national resource that we need badly and must conserve by every reasonable means.

Dr. Gaarder's statement not only was responsible for promoting increased interest in and direct support of bilingual education. His specific recommendations for implementing new programs have also influenced the design and

approach of many of the new programs. The five recommendations are given here in direct quotation:

1) That comprehensive programs of bilingual education in self-selected schools and for self-selected pupils at all school grade levels be supported.

2) That the opportunity to profit from bilingual education be extended to children of all non-English-speaking groups. All are now losers under our present educational one-language policy: at worst they become hopelessly retarded in school; at best, they lose the advantage of mastery of their mother tongue.

3) That adequate provision be made for training and otherwise securing teachers capable of using the non-English tongue as a medium of instruction.

4) That there be provision for cooperative efforts by the public schools and the non-English ethnic organizations which have thus far worked unaided and unrecognized to maintain two-language competence in their children.

5) That provision be made for safeguarding the quality of the bilingual education programs which receive Federal financial assistance.

(Statement by A. Bruce Gaarder, Chief Modern Foreign Language Section, U. S. O. E., May 18, 1967.)

READING COMPREHENSION IN BILINGUAL PROGRAMS

Nancy Modiano's study of reading comprehension in Mexico was among the first careful investigations of the consequences of introducing reading in the mother tongue. She reports on her study in The Center Forum, (Vol. 4, No. 1, September, 1969). She compared the reading comprehension in Spanish of Indian children who had attended a bilingual school with that of Indian children who had attended all-Spanish schools.

The report, "Global Perspective: National Languages and Local Vernaculars," is introduced by a survey of world-wide approaches to literacy in countries having large populations who do not speak the "national language." The two chief methods found to be employed were use of the vernacular to teach reading initially, and use of the national language exclusively. Studies support both approaches, but "direct comparisons have been rare and generally have been flawed by poor research designs or methodology."

In the study in Mexico, sample schools for each approach were matched by demographic data, and entire school populations were tested. Two measures were used: 1) teacher opinion in the selection of students who could "understand what they read in Spanish," and 2) a test for reading comprehension in Spanish which was developed for this study and was patterned after standard reading comprehension tests but was based on local cultural materials.

The test scores showed that the children from the bilingual schools, where they had first been taught to read in the vernacular, ranked significantly higher in their comprehension of written Spanish than the children in schools where reading had been introduced in the national language. Dr. Modiano attributes the difference to three factors.

1) "The nature of the reading act." Having first learned to read in their own language, the children already had reading skills with which to approach the second language. "When the symbol represents a nonsense syllable learned by rote this is far more difficult and confusing than when it represents a known object; learning to

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read in a foreign language is far more difficult and con-
fusing then learning to read in one already known."

2) "Attitudes toward reading in a second language."
The learning of a second language is easier for a child if
he sees a need for it and if it does not appear "to move
him away from his reference group."

3) "Teachers' ability to communicate meaningfully with
their students." The students from the bilingual schools
had been taught by local Indians who had had little formal
schooling and had not thoroughly mastered Spanish them-
selves. The teachers in the national language schools were
native speakers of Spanish, often from other parts of the
country. They had had much more schooling, but had more
difficulty communicating with their students because they
were less "cognizant of the more subtle nuances of the local
cultures."

Dr. Modiano's research clearly supports the assumption
long maintained by many linguists that reading is most ef-
ficiently introduced through the dominant language of the
child. It also carries "strong implications for staffing"
experimental minority group programs on the elementary lev-
el. Apparently, for a reading teacher, mastery of the new
language is secondary to a thorough and sympathetic under-
standing of the local culture.

BILINGUAL SCHOOLING IN THE UNITED STATES

All of our readers who are currently involved or about
to be involved in the planning of bilingual projects will
want to have the two volumes announced here as basic refer-
ence books in their library. Volume One, a monograph by
Theodore Andersson and Mildred Boyer, has chapters on the
following subjects (we have omitted introduction, definition,
and conclusion):

Bilingual Schooling: An Historical Sampling
A Rationale for Bilingual Schooling
Planning A Bilingual Program
The Program
Needed Action and Research
Bilingual Schooling: Implications for Education
     and Society

The volume concludes with an extensive bibliography
and a subject-matter index for the bibliography, a highly
useful addition for those not familiar with the field.

Volume Two is a collection of appendices. These in-
clude the Bilingual Education Act (Title VII), guidelines
for program planning, and guidelines for programs in teacher
education. They also include reports on specific language
groups. (For example, Appendix S, by Carol Phillips, deals
with Indians, Eskimos, and Aleuts.) Of special interest to
many will be Appendix W, a directory--admittedly preliminary
and incomplete--of resource persons, organizations, and
sources of material.

The project was undertaken by the Southwest Education
Development Laboratory in Austin, Texas, with support from
the U.S. Office of Education. The two volumes are for sale
by the Superintendent of Documents, U. S. Government Print-
ing Office, Washington, D. C. 20402. The price is $6.00,
and the volumes are sold in sets only.

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CONTRASTIVE LINGUISTICS AND ITS PEDAGOGICAL IMPLICATIONS
edited by James E. Alatis

The Nineteenth Annual Georgetown Round Table, held
at Georgetown University under the auspices of the School
of Languages and Linguistics, was devoted to contrastive
linguistics and its implications in the classroom. This
report of the Round Table contains the papers which were
presented at the sessions.

The relevance of contrastive analysis to the effective-
ness of language teaching has become a broad subject of de-
bate, and Dr. Alatis and others planning the conference saw
in this debate an interesting and productive source of dis-
cussions at the Round Table. While at first it was expected
that contrastive studies would "provide the basis for more
effective classroom practices (in the teaching of foreign
languages) by systematically revealing those aspects of the
target language which needed particular emphasis through
carefully constructed drill," (Alatis p. 1) doubts have
been expressed more recently upon the value of contrastive
analysis as a pedagogical tool. To ensure a thorough ex-
posure of the problem, scholars representing a wide range
of opinion were invited to participate.

The result is an interesting collection of fifteen
papers examining all sides of the question of the rele-
vancy of contrastive linguistics to language pedagogy. The
term, "contrastive," was defined by John Lotz (p. 9) as the
"systematic comparison of certain groups of elements in
two (or more) languages, without any reference as to their
genetic relationship, typological affiliation and so on."

After introductory remarks by John Lotz, the speakers
(some of whom came from abroad for the conference) were:

Robert P. Stockwell	Eric P. Hamp
William G. Moulton	Wilga M. Rivers
H. A. Gleason, Jr.	J. C. Catford
Robert J. Dipetro	Robert A. Hall, Jr.
A. Bruce Gaarder	W. R. Lee
Charles A. Ferguson	W. Freeman Twaddell
Robert Lado	Kenneth W. Mildenberger
John B. Carroll	

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The report should be of value to every teacher of lin-
guistics, applied linguistics, and foreign languages.

ROUND TABLE AND ESL

Many of our readers will be equally interested in the
report of the   Twentieth Annual Georgetown Round Table:
Linguistics and the Teaching of Standard English to Speakers
of Other Languages or Dialects, edited by James E. Alatis.
(No. 22, 1969).   Following the pattern of recent Round
Tables, all sixteen of the papers represented at the meeting
were focused on the subject announced in the title. In ad-
dition to the papers of the Round Table itself, this edi-
tion includes the four presented at the Washington Linguis-
tics Club "Eve of the Round Table Meeting," which had as
its theme a related topic, "Sociolinguistics and Urban
Language Research." Together, the collection provides a
large source of bibliography and discussion for the ESL
worker who wishes to keep abreast of developments in the
field.

Two of the papers which are pertinent to our newsletter
theme are:

1) Virginia F. Allen, "A Second Dialect is Not a
    Foreign Language,"
2) William Labov, "The Logic of Non-Standard English."

CONTRASTIVE LINGUISTICS
AT THE CENTER FOR APPLIED LINGUISTICS

by William Nemser

In the June 1970 issue of The Linguistic Reporter,
William Nemser summarizes the contributions made by the CAL
to the development of contrastive linguistics. His defini-
tion of the field is a rather special one, focusing as it
does on the practical implications of language comparisons.
For him, contrastive linguistics is "the subdiscipline of
linguistics concerned with drawing the pedagogical implica-
tions [italics ours] of structural differences and similari-
ties between languages."

First to be discussed are two books published by the
CAL in 1960. Nancy Kennedy's Problems of Americans in Mas-
tering the Pronounciation of Egyptian Arabic, and Daniel
Cardenas' Introduccion a una comparacion fonologica del es-
panol y del ingles. Then Mr. Nemser describes the Contras-
tive Structure Series, which was organized by the CAL under
a contract with the U.S. Office of Education to produce com-
parisons of English grammar and phonology with that of the
five most commonly taught languages in the US: French, Ger-
man, Italian, Russian, and Spanish. The French, German, and
Italian volumes have been published by the University of
Chicago Press; the volumes on French and Russian are being
made available through ERIC. (See the Spring 1970 issue
of this Newsletter for a brief discussion of ERIC.) A by-
product of this research was the publication of two bibli-
ographies on contrastive linguistics by the CAL. The most
recent of these, by Hammer and Rice in 1965, is currently
being updated.

In the next section of the article, Mr. Nemser dis-
cusses the CAL's Language Handbook Series. The volumes in
this series "were designed to provide concise outlines of
the grammatical structures of the major languages of Asia
and Africa together with descriptions of their history, so-
ciolinguistic functions, and surveys of their literary tra-
ditions." Some of these volumes also presented brief con-
trastive analyses of the languages concerned with English.
Both the Bengali volume and the Swahili volume contain con-
trastive material; and a volume of Vietnamese, to appear

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late in 1970, also has some "contrastive information."

Then Mr. Nemser discussed the preparation of Teaching English to Speakers of Choctaw, Navajo and Papago: A contrastive Approach. (This volume was reviewed briefly in the Spring 1970 issue of the Newsletter.)

In the latter part of the article, Mr. Nemser discusses the present involvement of the CAL with the Yugoslav Serbo-Croation-English Contrastive Project. And he mentions that other projects are in the planning stage, projects involving contrastive studies in Romania, Hungary, Czechoslovakia, Hungary, and Poland. Still other projects "in the planning stage" will deal with a Scandinavian language, an African language, a language of India, and Quechua, a language widely spoken in South America. Finally, in cooperation with the American Council on the Teaching of Foreign Languages, the CAL is in the process of setting up a rapid dissemination service, Studies in Contrastive Linguistics. According to Mr. Nemser, "The service will make available, in microfiche and hard copy, studies of practical and theoretical orientation in the field of contrastive linguistics. Titles will be announced and abstracts published in Foreign Language Annals."

One can readily agree with Mr. Nemser's conclusion that "research activity of such scope and variety should yield results with important implications for the field of contrastive linguistics." One may conclude, too, that in view of the many activities described here, the study of contrastive linguistics is very much alive, and that a number of influential linguists and educators obviously are convinced of its pedagogical importance and usefulness.

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THE CONTRASTIVE ANALYSIS HYPOTHESIS

by Ronald Wardhaugh

Among the important questions being raised by those
designing the language curricula for bilingual programs is
the need for and possible application of a contrastive
analysis of the two languages that are to be used in the
classroom. Linguists in the 40's and 50's would have been
almost unanimous in their insistence on priority of con-
trastive analysis in the preparation of effective teaching
materials. Charles Fries, the earliest and at that time
the most influential American scholar to write extensively
on the principles and methodology of EFL (in those days it
was English as a foreign language, makes the following com-
ment in his Teaching and Learning English as a Foreign
Language. (1945):

> The most efficient materials are those that are
> based upon a scientific description of the language
> to be learned, carefully compared with a parallel
> description of the native language of the learner. (p.9)

In short, Fries says that by comparing the native language
of the student with the language to be learned (the target
language) it is possible to predict the exact difficulties
the learner will encounter, and that the list of difficul-
ties so developed will play a vital role in determining the
shape and design of the language lessons. This approach,
known as the "contrastive analysis hypothesis," was ac-
cepted without question by the majority of linguistics and
textbook writers in the 40's and 50's, despite the fact
that, as far as we know, no widely used sets of materials
were produced that were actually based in detail on full
descriptions of the native and target languages involved.

In a recent paper delivered at the TESOL Convention in
San Francisco in March, 1970 (to be published in a future
edition of the TESOL Quarterly), Professor Ronald Wardhaugh
of the University of Michigan reexamines the development of
the contrastive analysis hypothesis and makes some pene-
trating observations about its validity--observations that
should be considered and weighed with care by all those

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concerned with materials preparation for bilingual programs.
A brief summary of his main points will follow.

Early in the paper, Professor Wardhaugh distinguishes
between what he calls a strong version and a weak version
of the hypothesis. The strong version, which in theory was
adhered to by many, might best be exemplified in a quote
from Robert Lado's Linguistics Across Cultures (1957):

> The plan of the book rests on the assumption
> that we can predict and describe the patterns that
> will cause difficulty in learning, and those that
> will not cause difficulty, by comparing systemati-
> cally the language and culture to be learned with
> the native language and culture of the student. (p.vii)

As Wardhaugh points out, this strong version (which as-
sumes that difficulties can be predicted in advance) "makes
demands of linguistic theory, and, therefore, of linguists,
that they are in no position to meet." Among other things,
it assumes full and completely parallel descriptions of the
two languages--descriptions which as yet linguists have
been unable to produce.

In practice, Wardhaugh says, the linguists have actu-
ally based their contrastive studies on a weak version of
the hypothesis. This weak version can be briefly charac-
terized as follows:

1. The linguist begins with a list of mistakes actu-
   ally made by speakers of X learning Y.

2. He then looks at the languages concerned in order
   to account for the mistakes and to explain if pos-
   sible their systematic nature.

In short, the linguist begins with "actual evidence" and
makes no attempt to predict mistake in advance.

This kind of approach seems to hold the most immediate
promise for textbook writers and teachers. It is a rela-
tively easy matter for teachers to prepare a list of mis-
takes commonly made by his students. With help from a lin-
guistic consultant, these mistakes can be ordered and
classified. Then a linguist familiar with the first lan-
guage of the learner can attempt to account for the mistakes
by pointing out systematic differences which create interfer-

ence problems. This approach, at once both practical and modest, makes no extravagant demands on linguistic theory. It has proved useful in the past and will no doubt continue to have a place in bilingual programs.

But even the weak approach to contrastive analysis, Wardhaugh points out, has been called into question. One group of generative-transformation linguists has begun to question whether contrastive analysis has any value whatso-ever in second language teaching. Their point, in brief, is that the task of learning another language well, of approximating the competence of a native speaker, involves essentially the knowledge of how deep structures are related to surface structures in that language. Since the process of relating deep to surface structures is unique for each language, there is nothing to be gained by comparing the surface structures of both languages. Such a claim, in its extreme form, would be hard for many experienced teachers to accept. For the experienced teacher knows that his students do make certain mistakes that are caused by inter-ference from the first language, and that these mistakes merit systematic treatment in the classroom.

Another group of generative-transformation grammarians have attempted to work "within the weaker version" of the hypothesis and to suggest new approaches to account for such matters as whether the student of a particular language without [ə] will pronounce think with [t] or [s]. Their approach, Wardhaugh feels, holds more promise for the class-room than the work of others who are attempting to identify language universals--"gross similarities between deep struc-tures in a variety of languages."

Wardhaugh concludes his paper by predicting that con-trastive analysis will probably have "less influence on second language teaching" in the near future--a prediction, we personally hope, that will not prove to be accurate. In any event, we feel that Wardhaugh's article should be re-quired reading for all those who are preparing materials for the language strand of a bilingual program.
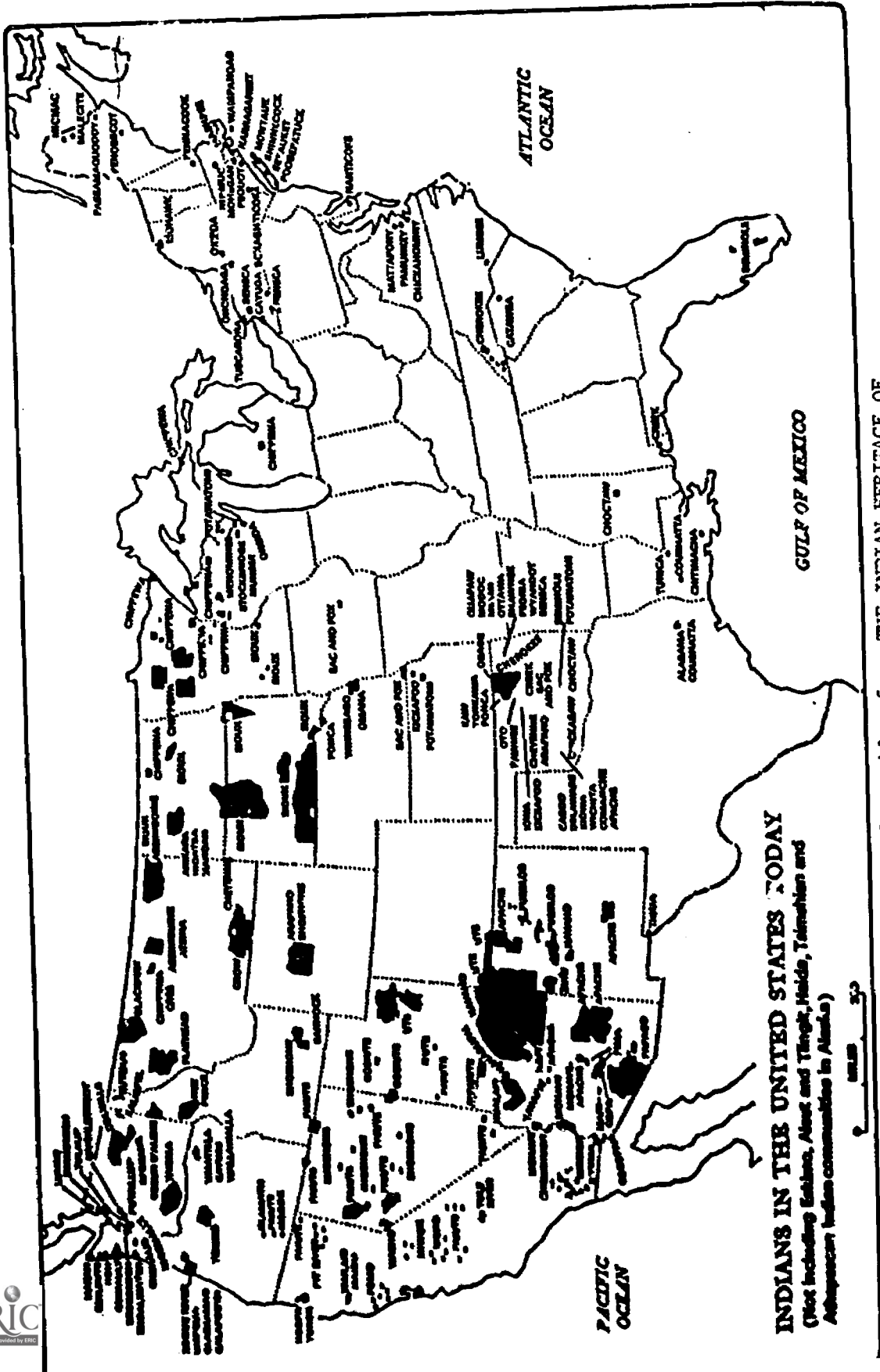
INDIANS IN THE UNITED STATES TODAY

(Not including Eskimo, Aleut and Tlingit, Haida, Tsimshian and Athapascan Indian communities in Alaska)

SCALE 500

ATLANTIC OCEAN

GULF OF MEXICO

PACIFIC OCEAN

Map by Jean Paul Tremblay from THE INDIAN HERITAGE OF
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SIL LINGUISTS CURRENTLY WORKING WITH
NORTH AMERICAN INDIAN LANGUAGES

A number of American Indian languages still do not
have alphabets, nor do they have the grammars and diction-
aries that could serve as basic references for those who
are involved in the preparation of the introductory read-
ing materials for bilingual classrooms. The field work
that is presently being carried out by linguists from the
Summer Institute of Linguistics will be invaluable in pro-
viding background information for the preparation of be-
ginning readers in a number of important language groups.

Dr. Irvine Davis, Director of the North American Branch
(Box 68, Eastlake, Colorado 80615) has provided us with the
following list of names anu addresses of SIL field workers.
In a letter accompanying the list, Dr. Davis says:

> In the United States proper, those who have been in-
> volved to the greatest degree in literacy and bilin-
> gual education include Miss Faith Hill, who is now
> involved in an adult literacy program at the govern-
> ment Navajo school in Tohatchi and who has had wide
> experience with the Navajos and Apaches in the South-
> west; Curtis Cook, who has cooperated with local
> schools in this area; Ray Gordon, who is becoming ir-
> volved in the projected bilingual program for the Crow;
> Dean Saxton, who has taught Papago extension courses
> through the University of Arizona; and Dr. Randall
> Speirs, who has acted as a consultant for certain pro-
> grams in New Mexico. Most of the others have done at
> least some preliminary work in literacy.

Anyone interested in more detailed information about
the studies currently underway may write directly to the
field workers on the list.

SUMMER INSTITUTE OF LINGUISTICS -- North America Branch

ALASKA
Base: Box 1028, Fairbanks, Alaska 99701
Eskimo: Dave Shinen, Box 629, Nome, Alaska 99762
        Wilfried Zibell, Noorvik, Alaska 99763

ALASKA con't.
  Kutchin: Dick Mueller, Box 68, Fort Yukon, Alaska 99740
  Koyukon: Dave Henry, Box 1028, Fairbanks, Alaska 99701
  Upper Kuskokwim: Ray Collins, Rural Branch, Nikolai,
        Alaska, 99691
  Upper Tanana: Paul Milanowski, Mile 1284 Alaska Highway
        Via Delta Junction, Alaska 99737
  Tlingit: Misses Constance Naish and Gillian Story,
        Bletchingley Road, Merstham, Redhill, Surrey,
        England.

CANADA
  Dogrib: Herb Zimmerman, Box 551, Yellowknife, N.W.T.
  Slave: Vic Monus, Box 1505, Hay River, N.W.T.
  Beaver: Marshall Holdstock, Goodlow, B.C.
  Sekani: Dave Wilkinson, Ware, B. C.
  Carrier: Dick Walker, Box 365, Fort St. James, B.C.
  Babine: Henry Hildebrandt, Box 586, Burns Lake, B.C.
  Stoney: Warren Harbeck, Box 32, Morley, Alberta
  Blackfoot: Don Frantz, Box 24, Arrowwood, Alberta

UNITED STATES
  Cocopa: Tom Nevers, Box 430, Somerton, Arizona 85350
  Papago: Dean Saxton, Box 368, Sells, Arizona   85634
  Hopi: Jonathan Ekstrom, Box 1207, Winslow, Arizona 86047
  Navajo and Western Apache: Miss Faith Hill, Box 7
        Tohatchi, New Mexico 87532
  Ute: Jack Green, South Route, Cortez, Colorado 81321
  Taos: Dave Hull, Box 1141, Taos, New Mexico 87571
  Tewa: Randall Speirs, Rt. 2, Box 60, Espanola, New
        Mexico 87532
  Jemez: Misses Bea Myers and Hazel Shorey, 2623 Sixth
        Street, Albuquerque, New Mexico 87107
  Zuni: Curtis Cook, Box 555, Zuni, New Mexico 87327
  Mescalero Apache: Miss Elaine Clark, Box 253,
        Mescalero, New Mexico 88340
  Northern Paiute: John Anderson, Box 51, McDermitt,
        Nevada 89421
  Crow: Ray Gordon, Crow Agency, Montana 59022
  Mikasuki Seminole: Dave West, 349 Mission Road, Glen-
        dale, California 91205

AMERICAN INDIAN LANGUAGES
NOW IN USE

For people concerned with teaching English to Indians,
a list of the Indian languages which are spoken by more than
1000 people in the United States today might help in defin-
ing which teaching approach would best serve the purposes of
the people who are learning. The following list was select-
ed from one prepared in 1962 by Professor Walter L. Chafe for
the Bureau of American Ethnology. The report of his survey
was published under the above title in International Journal
of American Linguistics, Vol. 28: 162-171. A later correc-
tion of this list was published in 1965, Vol. 31: 345f, and
has been incorporated into our list. In addition, we have
used a list from Dr. Wick R. Miller, where possible, to in-
dicate affiliation with the major language families of the
United States.[1]

Dr. Miller has pointed out that many figures which
would be useful to educators and administrators are diffi-
cult to obtain because of the problems involved in matching
speakers with reservations or with other administrative
units. BIA records help only in the rare cases where admin-
istrative units, cultural units, and linguistic units match.
Frequently two or more groups were removed to the same res-
ervation, resulting in "intermarriage and Indian bilingual-
ism (between two Indian languages)." As Miller points out,
this kind of language situation presents a complex problem
for the nose counter.

One example of the complexity of census taking can be
found in the Report of the Commissioner of Indian Affairs,
(1900):

> This is the first time that the Bannock and Sho-
> shoni tribes have been reported together, the
> population of the two tribes having always been
> reported separately. They are so intermarried
> and related to each other that it is nearly im-
> possible to distinguish one from the other, many
> individuals being the offspring of intertribal
> marriages.[2]

Dr. Miller has compiled a list of the largest and most extensive language families in terms of present day speakers and states that at a distant time level, some of the families were related to each other or to other families.

1.	Eskimo-Aleut	8.	Zuni
2.	Athabaskan	9.	Keresan
3.	Salish	10.	Siouan
4.	Penutian	11.	Caddoan
5.	Hokan	12.	Muskogian
6.	Uto-Aztecan	13.	Iroquan
7.	Kiowa-Tanoan	14.	Algonquian-Ritwan[3]

Chafe groups the age of the speakers into three classes in which the majority of speakers are 1) all ages, 2) over 20, and 3) over 50. He also gives numerical estimates of the number of speakers of each language, ranging from one to several thousand. We have chosen from his list only those languages which are thought to have at least 1000 speakers of all ages, believing these to be the ones most likely to be concerned with the bilingual teaching or learning of English. Since adequate bilingual programming usually entails long-term expenditures of time and effort in collecting language samples, preparing and producing materials in the native language, and implementing a good program, perhaps an approach of more practical value could be found for those children whose native language is spoken by fewer than 1000, especially where the majority of those who do use it are already over 20.

A great amount of more explicit information may be found in the two articles by Dr. Chafe. Our readers may be interested in some of the following points:

1. Dr. Chafe's rationale for distinguishing between languages and dialects,
2. His separate list of over 280 languages and dialects classified according to
   a. number of speakers (five categories: 1-10; 11-100; 101-1000; 1001-10,000; and over 10,000.)
   b. according to age of majority of speakers,
3. His offer to supply information about whether unpublished linguistic information exists about any of the languages.

1. Acoma. See Keresan.
2. Apache. Chirichua. 100-1000. Arizona. Some in Okla-
   homa. (Athabaskan. All Apache and Navajo are very
   closely related.)
3. Apache, Jircarilla. Approx. 1000. New Mexico. (Atha-
   baskan)
4. Apache, Mescalero. Approx. 1000. New Mexico. (Atha-
   baskan)
5. Apache, Western. 8000-10,000. Arizona (White Mountain,
   3000-4000; San Carlos 3000-4000; Cibecue, approx.
   1000; Tonto, approx. 500). (Athabaskan)
6. Arapaho. 1000-3000. Wyoming, Oklahoma. (Algonquian)
7. Assiniboin (Stoney). 1000-2000. Montana, Alberta,
   Saskatchewan. See also Yankton, Teton, Santee.
   (Siouan)
8. Blackfoot. 5000-6000. (few children in Montana) Al-
   berta, Montana. (Algonquian)
9. Cherokee. Approx. 10,000. Oklahoma, North Carolina.
   (Approx. 1000 speakers North Carolina or Middle dia-
   lect.) (Iroquois)
10. Cheyenne. 3000-4000. (few children in Oklahoma) Mon-
    tana, Oklahoma. (Algonquian)
11. Chickasaw. 2000-3000. Oklahoma. See also Choctaw.
    (Muskogian)
12. Chiricahua. See Apache, Chiricahua.
13. Choctaw. Approx. 10,000. Oklahoma, Mississippi,
    Louisiana. See also Chickasaw. (Muskogian)
14. Cibecue Apache. See Apache, Western.
15. Cree. 30,000-40,000. Montana, Canada. (Algonquian)
16. Creek. Approx. 10,000 Oklahoma, Alabama.
    (Seminole approx. 300) (Muskogian)
17. Crow. Approx. 3000. Montana. (Siouan)
18. Dakota. See Santee, Yankton, Teton, Assiniboin.
    (Siouan)
19. Eskimo, Inupik. 40,000-50,000. Alaska, Canada,
    Greenland. (Eskimo-Aleut)
20. Eskimo, Yupik. 13,000-14,000. Alaska, (Approx. 900
    additional speakers in Northeastern Siberia.)
    (Eskimo-Aleut)
21. Fox, (including Sac). Approx. 1000. Iowa, Oklahoma,
    Kansas. (Few children in Oklahoma and none in Kan-
    sas.) See also Kickapoo. (Algonquian)
22. Gitksan. See Tsimshian.
23. Gosiute. Included in Shoshoni.
24. Hopi. 3000-5000. Arizona. (Uto-Aztecan)
25. Isleta. 1000-2000. New Mexico. (Kiowa-Tanoan)
26. Jemez. Approx. 1200. New Mexico. (Kiowa-Tanoan)

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27. Jicarilla. See Apache, Jircarilla.
28. Keresan. Approx. 7000. New Mexico. (Acoma, 1000-2000; Cochiti, approx. 500; Laguna, approx. 2000; San Felipe, approx. 1000; Santa Ana, approx. 300; Santo Domingo 1000-2000; Zia, approx. 300.) (Keresan)
29. Kickapoo. See Fox. Oklahoma, Kansas (few children) and about 500 in Mexico. (Algonquian)
30. Laguna. See Keresan.
31. Mescalero. See Apache, Mescalero.
32. Mohave. Approx. 1000. Arizona. See also Yuma, Maricopa. (Hokan)
33. Nakota. Included in Yankton.
34. Navaho. 80,000-90,000. Arizona, Utah, New Mexico. (Athabaskan)
35. Niska. See Tsimshian.
36. Ojibwa. 40,000-50,000. Canada, Montana, North Dakota, Minnesota, Wisconsin, Michigan. (Algonquian)
37. Omaha. 1000-3000. Nebraska. (Siouan)
38. Paiute, Southern. 1000-3000. Nevada, Utah, Arizona, California. See also Ute. (Uto-Aztecan)
39. Papago. 8000-10,000. Arizona (extending into Mexico. See also Pima. (Uto-Aztecan)
40. Pima. Approx. 5000. Arizona, Mexico. See also Papago. (Uto-Aztecan)
41. Sac. Included in Fox.
42. San Carlos Apache. See Apache, Western.
43. San Felipe. See Keresan.
44. San Juan. See Tewa.
45. Santee (Dakota proper). 3000-5000. Minnesota, North Dakota, South Dakota, Nebraska, Montana, Manitoba. See also Teton, Yankton, Assiniboin. (Siouan)
46. Santo Domingo. See Keresan.
47. Seminole. Included in Creek.
48. Shoshoni (including Gosiute and Comanche. Approx. 6500. California, Nevada, Idaho, Oregon, Wyoming. (Uto-Aztecan)
49. Stoney. See Assiniboin.
50. Taos. Approx. 1000. New Mexico. (Kiowa-Tanoan)
51. Teton, Lakota. 10,000-15,000. South Dakota, Montana, Manitoba. See also Santee, Yankton, Assiniboin. (Siouan)
52. Tewa. Approx. 2000. New Mexico, Arizona. (Hano, approx. 200; Nambe, 100-200; San Ildefonso 200-300; San Juan, approx. 1000; Santa Clara, 500-600; Tesuque, 100-200;) (Kiowa-Tanoan)
53. Tsimshian. Approx. 3000. British Columbia, Alaska. (Coast Tsimshian has the most speakers. Nishka, and
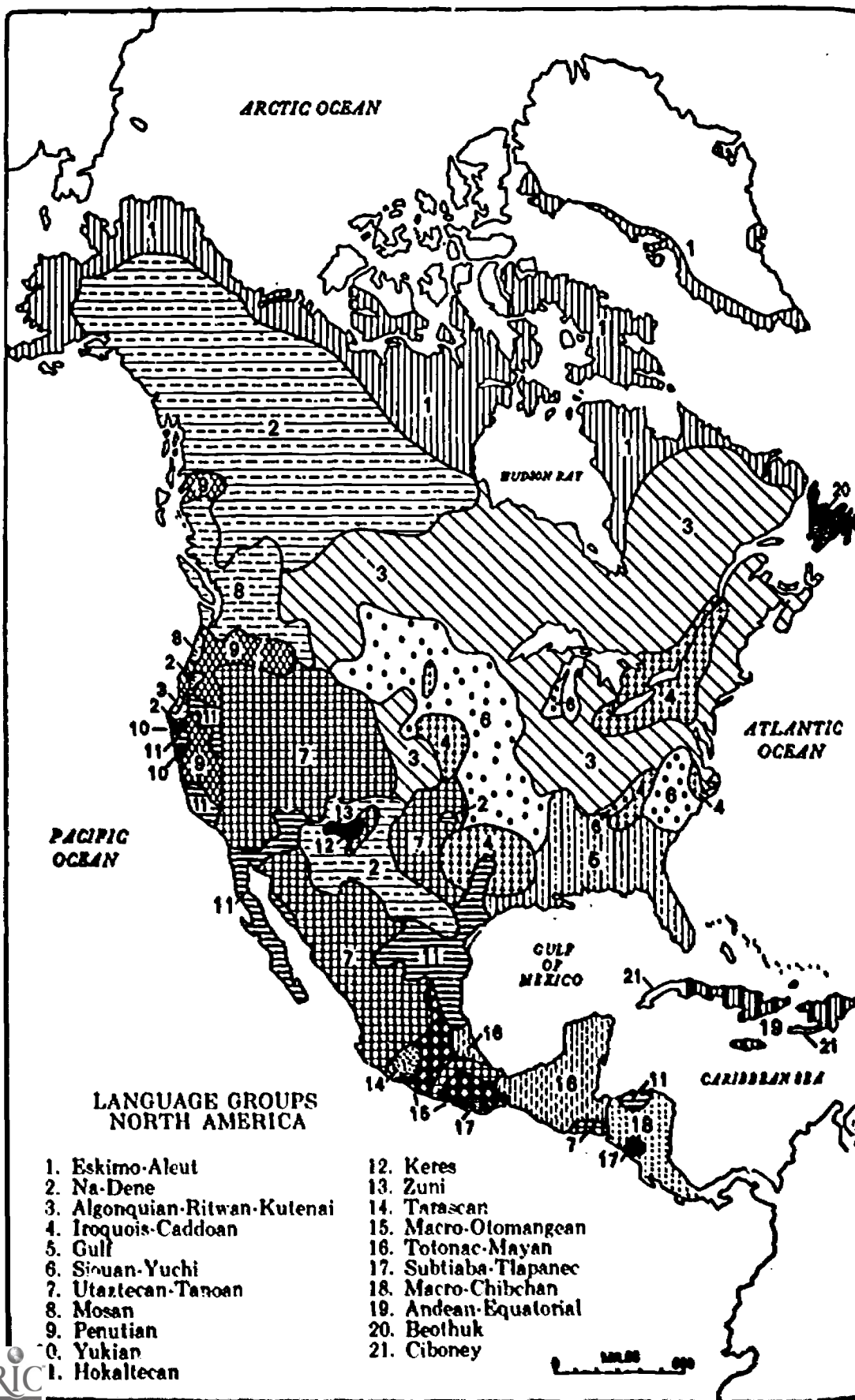
Gitksan have fewer than 1000 each.) (Penutian)
54. Ute. 2000-4000. Utah, Colorado. See also Paiute,
    Southern. (Uto-Aztecan)
55. White Mountain Apache. See Apache, Western.
56. Winnebago. 1000-2000. Wisconsin, Nebraska. (Siouan)
57. Yakima. 1000-2000. Washington.
58. Yankton. (Nakota, excluding Assiniboin). 1000-2000.
    North Dakota, South Dakota, Montana. See also Assini-
    boin, Teton, Santee. (Siouan)
59. Yuma. Approx. 1000. California. See also Maricopa,
    Mohave.
60. Zuni. 3000-4000. New Mexico. (Zuni)

References:

1. Wick R. Miller, Indian Languages of the United States.
   Unpublished typescript. University of Utah. March,
   1967. 10 pages.

2. Brigham D. Madsen, The Bannock of Idaho. Caldwell,
   Idaho: The Caxton Printers, Ltd., 1958, p. 325.

3. Dr. Miller indicates his sources as: "Chafe (1962 and
   1965), Hoijer (1946), Voeglin (1941), and Voegelin and
   Voegelin (1964 and 1965). Other sources have been used
   in occasional cases."

ARCTIC OCEAN

GREENLAND

ALASKA

ARCTIC

ATLANTIC OCEAN

HUDSON BAY

SUBARCTIC

NORTH WEST COAST

PLATEAU

EASTERN WOODLAND

GREAT BASIN

PLAINS

CALIFORNIA

SOUTHWEST

SOUTHEAST

ATLANTIC OCEAN

PACIFIC OCEAN

NORTHERN MEXICO

GULF OF MEXICO

CARIBBEAN SEA

MIDDLE AMERICA

CENTRAL AMERICA AND THE CARIBBEAN

CULTURE AREAS
AND TRIBAL LOCATIONS
NORTH AMERICA

0   MILES   800

ARCTIC OCEAN

HUDSON BAY

ATLANTIC OCEAN

PACIFIC OCEAN

GULF OF MEXICO

CARIBBEAN SEA

LANGUAGE GROUPS NORTH AMERICA

1. Eskimo-Aleut
2. Na-Dene
3. Algonquian-Ritwan-Kutenai
4. Iroquois-Caddoan
5. Gulf
6. Siouan-Yuchi
7. Utaztecan-Tanoan
8. Mosan
9. Penutian
10. Yukian
11. Hokaltecan
12. Keres
13. Zuni
14. Tarascan
15. Macro-Otomangean
16. Totonac-Mayan
17. Subtiaba-Tlapanec
18. Macro-Chibchan
19. Andean-Equatorial
20. Beothuk
21. Ciboney

MILES

Map by Jean Paul Tremblay from THE INDIAN HERITAGE OF AMERICA by Alvin M. Josephy, Jr. (C) Copyright 1968 by Alvin M. Josephy, Jr. By permission of Bantam Books, Inc.

GRAMMARS FOR NAVAJO

People who are working on Navajo materials may wish
to consult the following four books. Two of them were pre-
pared for use in teaching ESL to Navajos (See this News-
letter, Fall, 1968.): The first one is a course of study
in ESL for students above the elementary level; the second
is designed to provide teachers with a background of "in-
sight into the world-view of the Navajo" through his lan-
guage, so that they will be better equipped to teach in a
bilingual-bicultural situation.

The other two books are grammars of Navajo. The
first is a long-standing classic consisting of a descrip-
tive grammar and a bi-directional dictionary. The second
is a new publication for teaching Navajo to speakers of
English.

1. Vincent DeNunzio, A Course in Spokane English for
     Navajos. U.S. Bureau of Indian Affairs, Divi-
     sion of Education, 1967. 4 Vols., tapes and
     transparencies.

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3. Robert W. Young and William Morgan, The Navajo
     Language. A publication of the Education
     Division, BIA) Deseret Book Co., 1969, 348 p.
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4. Alan Wilson, Breakthrough Navajo: An Introductory
     Course. Gallup, New Mexico, University of New
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     $12.50.

SOCIAL FACTORS IN THE DEVELOPMENT OF
SHOSHONI-PANAMINT DIALECTS

The Shoshoni project at the University of Utah is a
National Science Foundation sponsored study of dialect for-
mation among the Shoshoni and Panamint speakers of the Great
Basin and adjoining areas among social groups with shift-
ing populations, low population density, small groups, and
no stratification--factors which differ from those in so-
cial groups previously investigated by dialectologists. The
project was begun in June, 1966, under the direction of
Dr. Wick R. Miller. The primary goals of the project are:
1) to understand the nature of Shoshoni dialects as they
existed aboriginally, and 2) to discover how dialect varia-
tion arose in this hunting and gathering society.

The methodology consists of examining the situation
as it now exists in order to reconstruct the earlier sit-
uation from a known base. For the collection of field data,
questionnaires were administered to about 100 informants;
texts were collected, and the sociolinguistic observations
were recorded. The questionnaire is a standardized method
for gathering lexical and phonological (phonetic, phonemic,
and morphophonemic) information and also includes a short
interview of a biographic nature which helps to reveal who
is, or has been, in communication with whom. It also re-
veals where, how often, and for what reason the communication
occurred.

William Labov has recently shown by his work that the
peer group is extremely important in the language social-
ization of the child. The work of the Shoshoni project,
however, has been concerned with a society in which the
peer group is frequently absent. The Shoshoni lived in a
sparse environment in which the population was dispersed
for most of the year into small, family-sized groups. Larger
groups were formed only during short parts of the year when
abundant food resources made larger groups possible. In
such a band level society, the function of the peer group
in language socialization must not have been as central as
it is in our own complex and highly stratified type of so-
ciety. In many cases, among the Shoshoni there was--and
still is--no peer group. It has been found that family by

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family cultural and linguistic variation, persists among the Shoshoni even today. Comparative work has made it possible to discover what linguistic features of Shoshoni have been undergoing variation and what social factors contribute to the linguistic variation.

The work of the Shoshoni project has already yielded information which in itself is useful in linguistic and anthropological studies. This information includes a Shoshoni phonology and a preliminary Shoshoni grammar (both developed by Dr. Wick Miller), extensive ethnographic materials concerning contemporary Shoshoni populations, numerous collected Shoshoni texts, a computerized Shoshoni-English lexicon, and a computerized concordance which gives examples of words in their context within the body of collected Shoshoni texts. Computer programs developed by Sydney Lamb and Laura Gould have been used in this project.

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MATERIALS

A NEW CURRICULUM FOR NAVAJO BEGINNERS

In the 1970-71 school year, nineteen classes of Navajo
Beginners will be following the new and highly innovative
curriculum that is being developed by CITE. The initials
stand for Consultants in Total Education,[1] a private organi-
zation devoted to the preparation of materials and the train-
ing of teachers in school systems that are emphasizing spe-
cial programs which also stress a bilingual and bicultural
approach. Because the CITE curriculum evolving for the Na-
vajo is a total one, involving all the subjects taught dur-
ing the entire school day, and because cf the complexity
and innovation of its design, we feel that it will be of
considerable interest to our readers and that it merits
more than a brief announcement in this issue.

Background and Rationale

The original idea for this project grew out of two
projects: an ESL workshop for 1,000 BIA teachers held in
Fort Wingate, New Mexico, in the summer of 1967; and a grant
to develop an ESL course for the training of teachers. The
workshop and the grant were sponsored by the Navajo Area
Office in Window Rock and organized by Dr. Robert D. Wilson,
who is on the staff of the English Department at the Univer-
sity of California at Los Angeles and who is now serving as
president of CITE, Inc. As the workshop progressed and the
ESL course was being developed, it became apparent to Dr.
Wilson and his colleagues that a daily ESL lesson, no mat-
ter how efficiently designed and skillfully taught, would
not in itself begin to meet the needs of the Navajo child.
They felt that the child should be allowed to use his na-
tive language for learning, and at the same time should be
learning to think in English. The solution seemed to lie
in a total curriculum, one in which all subjects were care-
fully planned to fit logically into a total scheme, and one
in which the special language needs of the child were con-
stantly kept in mind.

After the workshop, discussion continued with Dr. Wil-
son and the officials of the Navajo Area Office, chief among
them Dr. William Benham. As a result, sources of funding

were found in the BIA that permitted Dr. Wilson and his staff to prepare an experimental version of the curriculum for Beginners, which was taught in four pilot classes on the Navajo reservation during the 1968-69 school year. Based on the ensuing evaluations by both teachers and consultants, the materials were revised; and the revised materials were used in seven pilot classes during the 1969-70 school year. In 1970-71, the curriculum will be used in nineteen classrooms. In addition, materials for the first grade language arts are now being developed and are presently being tested in seven first grade classes.

Three of the important linguistic objectives of the program were stated by Dr. Wilson in a speech at the TESOL Convention in Chicago, March 7, 1969:

1. Competence in both adult Navajo and standard English.
2. Detachment toward both languages, the ability to function in either language or either culture whenever he chooses.
3. Ability to use both languages as tools of thought, English for those areas in which he must succeed in high school and college, Navajo for areas associated with his family and community.

In setting up the program, the staff agreed that the following factors are essential:

1. The definition of an adequate philosophy and rationale, which would have to be based on wide reading of available materials on curriculum and learning, as well as on the advice from experts in related fields. (For a list of some of these sources, see the appended bibliography.)
2. Innovations in materials, teaching strategies, and curriculum scope and sequence.
3. Adequate evaluation by teachers, CITE staff, and outside consultants, with subsequent revision and further class testing.
4. Extensive training of teachers and aides in both ESL and the other subject areas of the curriculum.

The rationale that was eventually developed is based on a set of assumptions about four critical areas: cultural, linguistic, psychological, and pedagogical. A CITE paper entitled "Presentation at New Schools, May, 1970" discusses

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these assumptions in some detail. We have space here only for abbreviated quotations from each set:

A. Psychological. There must be mastery of the structure of the subject matter and of strategies on how to learn. Motivation is crucial; the child must see that the need for learning a language is to be able to communicate in it.

B. Pedagogical. Pedagogy is scientific in that it predicts terminal behavior; it is creative in that it selects the intermediate behavior that will bring about the terminal behavior most effectively. Decoding is emphasized over encoding, initially. For learning to take place, every teaching activity must be interesting and understandable.

C. Linguistic. Language is an abstract, self-contained system of obligatory and optional rules. The use of these rules to form sentences is determined by the conventions of communication in a social context.

D. Cultural. People need not give up one culture to gain another; they may have a sense of self which enables them to function in any culture which they learn as a frame of reference and of which they have learned the language.

The Curriculum Itself

In a paper read at the 1969 TESOL Convention in Chicago, Dr. Wilson described the CITE curriculum as spiral and heuristic. The term spiral means that relations are added to the "systems of knowledge by...going back to the basic concepts of the systems." The term heuristic refers to an emphasis on" learning how to learn." The children are given tools for learning, Dr. Wilson says, by development of sensory perceptions, language skills, and mathematics. They are given strategies for learning by being taught to ask questions, to observe, and to use the empirical method of inquiry, one of forming assumptions based on evidence, and of testing, evaluating, and reformulating those assumptions.

The Beginner curriculum is divided into eight subject areas, which are called strands:

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| PRINCIPLES	LESSON PARTS	CONVENTIONS
Special Behavioral Objectives: All listed in the Teachers' Manual.	Reveal: Presentation and demonstration of exactly what the learners are to practice.	Through the use of puppets et al., signals are learned for watching, listening, volunteering, and role playing.
Provide appropriate practice. Provide immediate knowledge of results. 90 percent of the class must pass or objective is repeated.	Participation: Teacher calls on volunteers and signals for peer evaluation. Accuracy Test: Volunteers selected at random --about 1/3 of the class.	Children volunteer. Teacher cues children when to talk, participate, or evaluate. Peer Evaluation: Other children use conventional signals for showing that performance is correct or not correct.
Another practice session.	Renew: Objectives are reinforced using activity different from Reveal.	Motor Activity: Game or other physical activity which reinforces lesson.
Testing: 100 percent must pass on second try or lesson is repeated.	Quickness Test: 3-minute timer used to see how many volunteers can successfully perform in that time.	Peer evaluation.

LESSON DESIGN

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1. syntax (ESL)
2. phonology (ESL)
3. auditory (sensory)
4. visual (sensory)
5. math
6. tactile (sensory)
7. social studies
8. science

All the strands do not get equal emphasis, nor are all of them involved in the program at all times. As the program progresses, different subjects (e.g. reading) are picked up one by one and woven into the total fabric of the curriculum. Some idea of the intricate patterning can be gained by looking at the schedule from the first week.

The first week and one-half of school are spent in orientation and such activities as name switching from Navajo to English and English to Navajo, in order to give the child a "bilingual predisposition." Syntax is the first strand to be introduced, followed by a few lessons in phonology. By the beginning of the fourth week there are three strands alternating through the day -- syntax, phonology, and auditory, the first of the sensory strands. The auditory strand was given priority among the sensory strands in order to balance what appears to be the child's tendency to emphasize the use of the visual sense in learning. Next to be introduced are the visual and math strands, followed by tactile and social studies. The last to be introduced is science, at the thirtieth week. At the eighteenth week, the daily sequence is:

1. syntax
2. math
3. visual
4. auditory
5. tactile
6. syntax
7. social sciences
8. free period

Because most of the other subjects are learned through English, work on syntax and phonology get the major part of the attention during the first fifteen weeks, with the Navajo teacher or aide conducting discussions or explanations in Navajo. In general, the plan is to introduce structure and vocabulary several lessons in advance of the time they
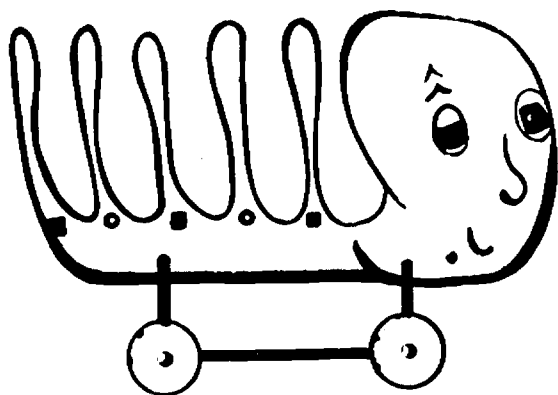
pit
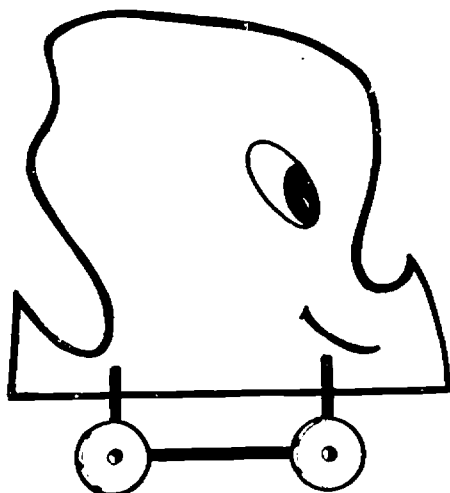
peat

are needed in the other strands. Occasionally, where a structure or a word is needed in a strand and cannot be incorporated into the language lessons in advance, a special ESL lesson is introduced to handle the new language items. The syntax lessons focus on sentence structures, while the other strands focus on word attack skills, and phrases.

It is difficult in short space to summarize the content and objectives of each strand. However, the list below, abstracted from a CITE paper ("Presentation at New Schools Using CITE Materials...Part II", May, 1970) may give our readers at least a general idea of what is covered in the program.

1. Syntax. The ESL strands, syntax and phonology, are so designed that for the first eleven weeks the child is not obliged to say anything in English. The syntax is initiated by use of simple imperatives to which a non-verbal response is easily demonstrable by the use of puppets, etc. The child later learns to respond to more complicated commands, yes-no questions, wh- questions, etc., by physical action or a nod or shake of the head. After the eleventh week, the child still is encouraged to participate verbally, but on a voluntary basis. Verbal participation from then on in all strands is partially voluntary and partially by random selection.

2. Phonology. This includes pronunciation of simple vowels and diphthongs, consonants and consonant clusters. It also involves phonological processes involved in word inflection and derivation.

3. Auditory. Here the children listen to speech and non-speech sounds and learn to distinguish such things as tempo, pitch, rhythm, order, and intonation patterns.

4. Visual. Here the children learn to recognize and reproduce visual configurations, to perceive symbols, including letters of the alphabet, to recognize left to right ordering, etc. This strand lays a foundation for plane geometry as well as for reading.

5. Math. For the math strand, CITE utilizes a program already published, Sets and Numbers, by Suppes and Suppes. The language is adapted somewhat for ESL learners; and the child works with concrete objects before being presented with the abstract concepts in the workbook.

6. Tactile. Here the children explore the sense of touch, learning such concepts as round and flat, rough and smooth. The tactile strand provides necessary concepts and language structures for the science strand that follows it, and establishes a "predisposition" for solid geometry.

7. Science. Here the children become familiar with such processes as observing, using space/time relationships, measuring, classifying, inferring, and predicting.

The lessons in all strands follow a smilar pattern. (See the lesson design on page 74.) They are planned for the achievement of a specific objective in a period of about 20 minutes. For example, a phonology lesson may use whimsical figures to demonstrate a minimal pair such as tot and dot. (See the whimsical figures on page 76.) A 20 minute lesson might be organized around this pair, at the end of which the children are tested to see if they are able to recognize and produce the relevant contrast.

Peer evaluation is an integral part of each lesson. The children listen carefully to the individual responding and use conventionalized signals to show whether they think the answer is correct or not. CITE believes the purpose of peer evaluation to be:

1. It keeps all the children actively participating.
2. It gives the volunteer immediate feedback on his performance.
3. He is aware of being tested.

Each 20 minute lesson is followed by 20 minute break in which the preceding practice is reinforced in a more informal context. It also provides time for language and culture "switching" for the children are free to play in either the Navajo corner or the English corner of the classroom, to carry the typical toys and objects from one to the other, and to use any language they choose.

Teacher Training

The training of teachers is a very important aspect of the CITE program. This training not only has the immediate goal of insuring effective use of the new materials. It has a significant, long-range goal, that of preparing a "curriculum teacher" -- a teacher so familiar with the principles underlying the curriculum and with the techniques of

using them that he will be able to change the program and develop new materials when necessary. The curriculum teacher, in short, can evaluate, revise, and innovate. The new teacher receives his first training at a two-week workshop on the Navajo during the summer before he is to take over a pilot class. Then training is continued throughout the year in briefer meetings in the area.

Evaluation

The over-all plan for evaluation of the CITE curriculum involves basically a three-year cycle. In the first year, the materials are class-tested in pilot sections; based on reactions of teachers and consultants, the materials are revised for a second experimental year. Once again, the materials are revised and in the third year the program becomes "operational", still subject to more revision and alteration but available to classes on a regular rather than an experimental and trial basis.

Since there are no standardized tests to elicit the kinds of information needed -- for example, progress in cultural switching, learning how to learn, and development of self-image -- The CITE staff has been obliged to design other ways of obtaining data. To collect the reactions of teachers, the staff has devised questionnaires and evaluation sheets. One sheet is a "Record of Lesson Length and Pupil Achievement," on which the teacher indicates whether the 20 minutes period was too long or too short for the achievement of the objectives of the lesson. It will be recalled that each lesson ends with peer evaluation; if less than 100 per cent respond correctly on the second try, the lesson is referred to the writers. A lesson requiring more than one repetition will obviously be either too long or too complicated for the children. A second type of sheet asks the teacher to (1) check the unit objectives with which the children had difficulty; (2) describe the difficulties briefly; (3) comment additionally about the objectives of the unit and (4) judge the suggested teaching procedures by checking a list (effective, satisfactory, or unsatisfactory) and comment additionally on the procedures. These sheets are mailed to CITE headquarters in Los Angeles as they are finished, thus enabling each writer to get prompt feedback on his own strand. They are also circulated to the entire staff in order to help coordinate the work of all the writers.

Evaluation by CITE consultants has also taken place.
Qualified staff members have sat in some of the classrooms
and taken detailed notes of the activities they observed.
And CITE is presently organizing a much more detailed kind
of evaluation in consultation with Dr. Wallace Lambert, a
well-known Canadian psychologist and authority on bilingual
education.

Conclusion

Recently our country has begun to feel more keenly
than ever the enormous challenge of designing new and more
effective curricula, especially in those contexts which de-
mand a meaningful interaction of two languages and two cul-
tures. The CITE curriculum, because of its imaginative
approach in over-all design and in detail, should be of in-
terest not only to specialists in English as a second lan-
guage and bilingualism but to educators and administrators
everywhere.

[1]Formerly known as Consultants in Teaching English

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MICHIGAN MIGRANT PRIMARY INTERDISCIPLINARY·PROJECT

To date, little bilingual material (for use through
more than the beginning phase of schooling) has been de-
veloped for speakers of American Indian languages.   But
since all bilingual materials, regardless of language
background, will have certain elements in common, we have
included here a rather detailed review of one set of materi-
als developed for speakers of Spanish in order to acquaint
our readers with some of the principles of organization
and curriculum content that might be adapted and modified
in the planning of programs for the American Indian.

Recognizing the failure of traditional school programs
to meet the needs of non-English speaking children in the
primary grades and beyond, the Migrant Program of the Michi-
gan Department of Education, with the cooperation of the
Foreign Language Innovative Curricula Studies staff, has
developed a three-level oral language program to prepare
Spanish-speaking children, both linguistically and concep-
tually, for normal first-grade work.

Unlike some programs, which stress the exclusive use
of the target language in the classroom, the Michigan Pro-
gram is bilingual at all three levels; that is, important
concepts, such as time, space, color, size, shape and func-
tion, are introduced first in Spanish, and appear in Eng-
lish lessons only after the children have demonstrated
understanding of them and have been exposed to the English
language structures necessary to express them. The Pre-
School Program roughly alternates English and Spanish les-
sons; the Kindergarten Program includes separate guides for
Spanish and English; and the Primary Program contains a
ten-minute Spanish activity for each thirty minutes of Eng-
lish instruction. Further, the entire program is designed
for use with a bilingual aide in the classroom to provide
additional help to the pupils when needed and to compen-
sate for the regular teacher's possible inadequacies in
Spanish.

In all of the prefatory material accompanying this
program, the importance of the adaptation to the needs of
the particular class is stressed. If the class is not en-
tirely Spanish-speaking, for example, several alternatives

are suggested: 1) working separately with the Spanish,
2) including the Anglos in the Spanish lessons, 3) or bring-
ing Spanish-speakers from several classes together for the
language lessons. The teacher is further cautioned to ex-
pand lessons as needed and to reduce lessons containing
structures the children already use with fluency. The im-
portant consideration, the guide states, is to achieve the
goals of the Program, not to follow it slavishly.

Accompanying the Program is a booklet entitled Devel-
oping Language Curricula, a brief introduction to linguistic
principles for the teacher of bilingual children, including
a detailed survey of interference problems of Spanish-
speakers learning English. The teacher is also given guide-
lines for interpreting reading "problems": are they, in
fact, problems with reading, or do they constitute phono-
logical interference? Such a contrastive analysis is in-
valuable for any teacher of bilingual children, but, unfor-
tunately, is available for very few languages.

The sequencing of linguistic material is generally
careful, with a structure introduced in one context and
then used later to introduce new concepts; that is, in each
new lesson, the child has a familiar reference point, wheth-
er conceptual or linguistic. For example, in Lesson 8,
the children are asked, "Is this block big or little?"
--after they have already had the simple yes/no question.
Later, when direction is introduced, the either/or ques-
tion pattern is again used in an activity with an inclined
board: "Are you walking up or down?" In this way, the
opposites are related to one another rather than being
handled individually.

The development of comparisons provides another ex-
ample of careful sequencing: Lesson 129 of the Kinder-
garten Program introduces comparatives with Adjective + -er,
followed in Lesson 130 by review and Adjective + -est of
all. The primary linguistic structure of Lesson 131 is:
"Which is the ___ -est of all," utilizing the new concept in
an already familiar pattern. The paraphrastic comparative
with more appears in Lesson 132, with the words safe and
dangerous to illustrate the contrast between -er and more.
Safest and most dangerous occupy Lesson 133, and the irreg-
ulars, good and better, are in Lesson 134, followed by best
and bad-worse-worst of all in Lesson 135.

The entire program has an enormous materials list,
including dolls, blocks, cars, trucks, fruits and vege-
tables, bags and boxes, and hand puppets, as well as the
typical classroom materials. The variety of activities re-
quiring the children to manipulate concrete objects should
make the contextual restrictions of certain language fea-
tures more real to them. For example, "What are you doing?"
and "Where did you put the balls?" are more meaningful to
a child in action than to a child looking at pictures of
activity. Other children can be then asked, "Where did he
put the (objects)?" after having witnessed the entire ac-
tion rather than merely a picture of its result.

Throughout the Kindergarten Program, auditory discrim-
ination tasks involving troublesome phonemes appear at in-
tervals. The children are asked to raise their hands when
they hear /m/ in final position, for example, or /uw/ vs.
/u/, or /i/ vs. /I/. For each work-list they are also ex-
pected to repeat the items, the teacher explaining and ex-
aggerating the articulation, if necessary. Since the
program does not provide pronunciation and discrimination
exercises throughout, this aspect of the acquisition of
standard English will probably have to be supplemented in
most ESL classes.

The conceptual content of the program is excellent,
ranging from naming objects to classifying them according
to size, color, shape, function, etc; from naming articles
of clothing and identifying the seasons to selecting ap-
propriate clothing because of the weather or climate; and
from "have" to "want" to "need" to "prefer." Rhymes are
utilized in various ways, including the command "Do some-
thing that rhymes with 'bump.'" Greetings, introductions,
manners, safety, and personal hygiene are also included, as
well as different types of jobs and houses for different
types of people. Geometric figures and the mathematical
concept of "sets" both utilize and supplement the lang-
uage practice.

Each lesson is preceded by a list of linguistic and
conceptual goals and one of possible interference problems;
but the activity itself is in "script" for only one--or at
the most, two--dialogue exchanges. One example of sketchy
instructions occurs in Lesson 88 of the Primary Program:
fruits, such as strawberries, apples and cherries, are
grouped by color. "After several items are grouped, en-
courage new groups by asking if there are any other groups

that the class may make. Use Wink [a hand puppet] to whisper suggestions."

A clever, experienced teacher will be able to adapt her own speech to the language level of her pupils; but if reliable results are expected from a program, language structures must be controlled at all times, not just during the ten minute language circle, and not just by experienced teachers. Further, the teacher needs some "patter" to get into the dialogue, to inform the children as to what is expected of them. In this area the Michigan Program seems skeletal.

A final question concerns the evaluation procedure, especially at the Pre-School level. The oral test used is based on the Dade County, Florida, Test of Language Development. The recommended procedure is to select five pupils at random every six weeks or so, and to project their performance by percentages to the rest of the class. In many cases, a given percentage of children performing at a given percentage of accuracy may indicate teacher success; but where the entire educational program depends upon control of the language of instruction, random sampling seems inadequate. In the Kindergarten and Primary Programs as well, responses are anonymously marked "standard" or "non-standard" and percentages computed, when ideally, and especially where an aide is present, the teacher should have individual records of her pupils.

The relevance of this Program to teachers of English to American Indian children lies largely in its basic philosophy of enhancing the home language by means of a bilingual aide and of presenting conceptual material in the home language--in effect, subdividing the child's learning tasks. Instead of magnifying the problems of language learning with a barrage of new concepts, those concepts are mastered in familiar language surroundings, freeing the language lesson for language skills alone. Further, recognizing the home language as a valid means of communication--as opposed to forbidding the native language on the school grounds, as some school districts do--should prevent much of the introversion suffered by bilingual children.

In addition, the Michigan Migrant Project is a storehouse of games and activities which could be used as supplements to any program. Since it is exclusively an oral language program, a separate reading program will be re-

quired in any event, and since it is designed to occupy a maximum of forty minutes per day, additional mater.als are obviously needed. In this respect, it offers itself as a sourcebook in any bilingual program, and as a model for lessons in other home languages than Spanish.

Finally, the interference charts are worth using as models by wr':ers of Indian materials. Reports from public school teachers on the fringes of Indian reservations in Utah indicate ignorance of the sources of pronunciation difficulties of their Indian pupils and, consequently, lack of means to assist them. If, they say, they knew where the problems lay, they would not feel so helpless. Contrastive analyses of English and the various Indian languages would provide this much needed information, just as the Michigan materials provide it for teachers of Spanish-speaking bilinguals.

(Michigan Migrant Primary Interdisciplinary Project, American Council on the Teaching of Foreign Language (ACTFL), New York, 1970 (Also published by the State of Michigan Department of Education).

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