TWO STUDIES: HOW LANGUAGE DEVELOPS IN CHILDREN

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(Patterns of development of language in children have implications for teaching in both elementary and secondary schools. Miss Nelson is a graduate student at the University of Minnesota.)

Walter Loban and Ruth G. Strickland have conducted separate longitudinal research projects concerning the language used by children in the kindergarten or first grade through sixth grade. Walter Loban's study was concerned with children's use and control of language, their effectiveness in communication, and the relationships among their oral, written, listening, and reading uses of language. Ruth Strickland's study was designed to analyze the structure of children's language in the first through the sixth grade, to compare it with the structure of the language in the books in which children are taught to read, and to ascertain, at a selected grade level, the influence of any apparent differences on the quality of children's reading skill.

A major hypothesis of the Strickland study was that a study of children's speech, its structure, and its patterns of arrangement and flow may offer suggestions for the construction of better reading textbooks for beginners and possibly for older children as well. Major questions guiding Loban's research were: (a) Just as in physical development, are there predictable stages of growth in language? (b) Can definite sequences in language development be identified? (c) How do children vary in ability with language and gain proficiency in using it?

The same new method of segmenting the subjects' oral language was used in both studies. To the syntactic and meaning approaches to language, the phonological approach was added. The resulting approach made maximum

use of both structure and meaning. First the subjects
speech was segmented by oral intonation patterns int
"phonological units." Second, "communication units,"
which are subdivisions of the larger phonological units,
were identified by the semantic meaning being communica-
ted. Third, elements impossible to classify phonologic-
ally or semantically made up tangles of language called
"mazes," which were not counted as communication units.
The material between parentheses is a maze: "...(an' an'
have to) I have to get my hair combed."

In the "First Level of Analysis" of the studies, com-
munication units were classified by a system of basic
structural patterns, such as

        Subject-Verb
        Subject-Verb-Object
        Subject-Linking Verb-Predicate Nominative
Nine patterns were discovered, showing the frequency and
variety of structural patterns used by the subjects. To
simplify this analysis, symbols were used: 1=Subject;
2=Verbs used as predicates; M=the movable parts of the
sentence (words, phrases, or clauses with no fixed po-
sitions).

In the "Second Level of Analysis" the component parts
of the patterns displayed at the first level were exam-
ined. For example, do some children use more subordi-
nate patterns than others? What does study of a child's
use of verbs reveal? What repertoire of movables does a
child produce?

The Loban Study

In addition, the Loban study classified subjects'
speech into such categories of function as Generaliza-
tions and Direct Questions. He also categorized such
features of style as Fluent to Halting and Conventional
in Usage to Unconventional in Usage. Four other methods
of analysis derived from other research were applied:
(1) amount of subordination, (2) classification of con-
ventional usage, syntax, and grammar, (3) classification
of vocabulary according to frequency of use in the lang-
uage, and (4) classification of vocabulary according to
diversity.

In addition to vocabulary tests, intelligence tests,
and a test of ability to use subordinating connectors,
the following ratings were procured: teachers' estimates
of the subjects' language ability, reading ability, wri-
ting ability, socioeconomic status, health, and school
attendance.

Subjects were 338 children chosen to represent a
stratified sample of a larger universe of children;
choice of subjects was based on representativeness of
sex, racial background, spread of intellectual ability,
and socioeconomic status.

A brief summary of the Loban findings:

A. Fluency with Language
1. During the first seven years of schooling, the
subjects speak more words in each succeeding year of
measurement. They also increase the number of communi-
cation units and the average number of words spoken in
each unit. The high subject group uses more words and
units than does the low group, maintains its initial
superiority over those low in language ability, and uses
a greater amount of subordination.

2. During the first four years of schooling, the low-
er group says less than the higher group and some mem-
bers have more difficulty saying it (their average num-
ber of words in mazes increases), although the subjects
as a whole decrease the number of mazes and words in ma-
zes.

3. Both the low and high groups use the same number
of words from among the 12,000 most commonly used words
in the English language; the low group shows a higher
incidence of words selected from the next 20,000; and
the high group gains ascendancy in the use of the least
commonly used words of the English language.

4. As measured by spoken style of language, the high
group is significantly more fluent than a random group
selected from the total sample, but their readiness of
response does not differ from that in the random sample.
The low group is less fluent than the random group and
may be somewhat slower to respond in speech.

B. Effectiveness and Control

Except for the linking verb pattern (used more by t[he] high group) and the use of sentence patterns that a[re] incomplete (used more by the low group), the differenc[es] in structural patterns of the two groups are negligibl[e]. However, one of the important findings of the study w[as] that at this level of language development, not patte[rn] but what is done to achieve flexibility within the pa[t]tern proves to be a measure of effectiveness and contr[ol] of language. For example, the nominals and movable el[e]ments show marked differences when low and high grou[ps] are compared.

C. Conventional Usage and Grammar

In the elementary school, difficulty with use [of] verbs is the most frequent kind of deviation from co[n]ventional usage. One major problem is concord; anoth[er] is consistency of verb tense. Subjects rated most pro[-] ficient in language are also those who manifest the mo[st] sensitivity to the conventions of language.

D. Tentative Thinking Through the Use of Provisional a[nd] Conditional Statements

Those subjects most proficient with language are th[e] ones who most frequently use language to express tenta[-] tiveness.

E. Reading and Writing

Those high in general language ability are also hig[h] in reading ability; those low in general language abili[-] ty are also low in reading ability. The gap between th[e] two groups widens from year to year. Writing ability i[s] related to socioeconomic position; those in the highes[t] three socioeconomic categories rated above average i[n] writing while those in the four lowest socioeconomi[c] categories rated below average in writing.

F. Coherence of Spoken Style

The high ability group seems to be no more coheren[t] in spoken style than a random group, whereas the lo[w] group is less coherent than the random group.

G. Interrelations Among the Language Arts

In this study, reading, writing, listening, and speaking show a positive relation. Subjects in the lowest and highest quartiles in writing are also lower and higher in reading achievement. The highest correlation in the study is between vocabulary and intelligence as measured by the Kuhlmann-Anderson group test of intelligence, where the product-moment correlation is .884. Vocabulary, success with group tests of intelligence, and proficiency with language constitute a cluster of traits (or possibly, they are different manifestations of the same trait).

Some of the implications of Loban's findings:

1. Teachers could use the research design utilized by Loban in analyzing their student's language.

2. Future research in language will probably develop and use Noam Chomsky's transformational analysis.

3. Clear stages of development in children's language are as yet unmarked.

4. Since, at this level, not basic sentence pattern but what is done to achieve flexibility within pattern proves to be a measure of proficiency, teachers can best aid pupils' expression when individuals or small groups with similar problems are helped to see how their own expression can be improved. Teachers should be guided by research in determining what to emphasize or to ignore; that is, they would need to be aware of the structural problems behind the semantic difficulties.

5. Instruction should do more with oral language, because students lacking skill in using speech will have difficulty in mastering written tradition. Competence in spoken language appears to be a necessary base for competence in writing and reading. Teachers could use tape recorders, and in the future they might use television tapes, which are now being designed for mass production. Gleason's suggestion that the separation of speech and English is absurd is well founded, it seems. Perhaps in the future English teachers will have more training in speech.

6. Language proficiency may be culturally as well as individually determined. Perhaps children from lower socioeconomic groups should be encouraged to do more

reading in class.

7. The positive relation between oral language and listening suggests that teachers might spend more time improving students' abilities to attend to what is said.

8. Future research is needed on the extent to which interrelations exist among the language arts.

9. It is probable that different aptitudes in language require different teaching techniques.

10. Teaching practice in the primary schools should not keep most students at the same reading tasks.

The Strickland Study

Ruth Strickland studied 575 children selected by random sampling, and schools from which students were enrolled covered the ethnic and socio-economic range of the community. The sample for some grades, however, was skewed somewhat toward the upper level in intelligence, occupational status, and parental education.

Some conclusions of the study:

A. Comparison of the Language Used by Children with the Language of Reading Textbooks

1. There appeared to be no scheme for the development of control over sentence structure which paralleled the generally accepted scheme for the development of control over vocabulary.

2. The basic subject-verb-object pattern was the only pattern to appear in the samples of practically all of the books.

B. Relationship of Language to Reading and Listening at Sixth Grade

1. The question of relationships between children's use of oral language and the skill they develop in oral and silent reading is one which seems to need study.

2. Children who ranked high in silent reading comprehension, oral reading interpretation, and listening comprehension made more use of the common structural patterns than did children who ranked low on these variables.

C. Relationship of Children's Oral Language to Textbook Language

The oral language children use is far more advanced than the language of the books in which they are taught to read. Evidence is needed as to whether children would be aided or hindered by the use of sentences in their books more like the sentences they use in their speech.

D. Importance of Phonological Study

It is possible that children need help in recognizing and understanding the entire phonemic scheme of English, both basic phonemes and suprasegmental phonemes of pitch, stress, and juncture.

A Suggestion for Teachers

Since the research indicates that children in elementary school have oral command of all the complex sentence patterns that they are likely to use, writing programs need to be developed which build on such understanding and use. One method might be for a child to speak to the class for five minutes or so while the rest of the students write down what they think the topic sentence is. Their judgments could be given to the speaker so that he could analyze the effectiveness of his speech and improve it. Immediate feedback would be provided in this way.

For Further Reading

Loban, Walter D.   The Language of Elementary School Children.   Champaign, Ill.: National Council of Teachers of English, 1963 (Research Monograph No. 1).

Strickland, Ruth G.   The Language of Elementary School Children: Its Relation to Language of Reading Textbooks and the Quality of Reading of Selected Children. Bulletin of the School of Education, Indiana University, 38 (July, 1962).