A Multi-Sensory Approach to Language Development in Children of Different Cultures.

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Abstract

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Paul Heinberg and Sarah Sanderson

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A MULTI-SENSORY APPROACH TO LANGUAGE
DEVELOPMENT IN CHILDREN OF DIFFERENT CULTURES*

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In trying to minimize the disadvantages of children from minority cultures in their first years of elementary school, the usual approach is to employ diagnostic tools which yield quantitative measures of such children's inadequacies, and then to teach in an attempt to yield higher scores. In the area of speech-communication this approach focuses on measurement of linguistic competence, and then training to enhance such measures.

Mass education proceeds from an assumed common experiential base. However, the lexicon of children from the majority culture is not a compilation of words that children from other cultures need to learn so much as they are labels for experiences which these other children have not had and which they must acquire to succeed in school.

These children are often referred to as "the disadvantaged." Their disadvantage rests in the denial of "some social experiences that are usually expected within the context of family living prior to entering school"--a denial based not on a calculated withholding of experiences but on the fact that these "social experiences" are not a part of the subculture or culture of which the child is a member.
A language acquisition approach is based on the speaker-is-valid model of communication. That is, a message produced by an educated speaker is a valid message. If it is not received as intended, then the listener is defective. This results in a focus on the disadvantaged as disadvantaged, first, in receiving communications and, secondly, in terms of their processing of language as receivers. More briefly, it is a focus on cognitions and on language processes. The multi-sensory approach to be described is based on the system-is-valid communication model, and this results in a focus on experiences and on communication outcomes.

II

The multi-sensory approach is not new. Dr. Maria Montessori, whom Jerome Bruner described as "a strange blend of the mystic and the pragmatist," was applying this system in her schools in Italy before the turn of the century. The Italian government was approached for help by Italian slum-landlords whose tenements were showing the ravages of the unharnessed energies of the unsupervised children of working mothers who were their tenants. In 1906 that government gave Dr. Montessori the responsibility for 60 of the six year old "normal" children--singled out from the others by their lack of economic and social experiences. Her approach is now internationally recognized and widely applied.

Not only is the multi-sensory approach not new; in theory it is not even challenged. The importance of the multi-sensory approach in terms of the experiences it directly affords the child is one point of agreement between the two leaders of childhood education--Jerome Bruner and Jean Piaget. Although these two men differ about types of mental operations of a child...
and their development, Jerome Bruner places the principal emphasis in education upon skills—"skills in handling, in seeing and imagining, and in symbolic operations, particularly as these relate to the technologies that have made them so powerful in their human expression" and Piaget distinguishes between experiences that the child participates in by watching (as in an experiment being performed) or by doing. The child must do, must act upon the objects, picking them up, handling them—"... school children and students should be allowed a maximum of activity of their own, directed by means of materials which permit their activities to be cognitively useful." The essence of Piaget's method is that the child should come to an understanding and awareness of the world through his own efforts—"discovery" is the key.

We differ from Bruner in not adhering to a prescribed structure for instruction and from Piaget in a somewhat impatient attitude toward his "stages of learning" which seem abnormally slow (especially when you consider that this is a man who published when he was ten years old). We are more inclined to agree with Susanne Langer's "optimum period of learning" for a child and that, if within this period the proper stimuli are present, learning of language will occur.

III

The female member of this writing team, Dr. Sarah Sanderson, was faced with this problem of cultural deprivation both on a personal and professional level at the time she served as Principal of the Lahore American School in West Pakistan. Children from American families who had been born in Pakistan or brought over at one and two years of age and...
who had been placed in the care of an "amah" who spoke Urdu and little or no English were being tested by the school psychologist and labeled as deficient in intelligence. (In fact, one little girl, Cindy, had been branded as a "moron" and not recommended for entry to the school.) Group intelligence tests can be said to be anything but culture-free (as, for example, the SRA Primary Mental Abilities test used in this case). To obtain more information, the Peabody Picture Vocabulary Test was administered to these children. The children were having trouble recognizing such things as a dust-pan, broom, milkman, awning, mailbox—items taken for granted by an American child in the Continental U.S. in the early 1960's. Cindy came out with a "normal" intelligence rating, but she still lacked the language to communicate with her teachers and classmates and, having spent most of her time playing on the river-banks and with other "amahs" and their charges, her experiences were not those of her peers in the American school.

As a Principal faced personally with the problem of what to do with a three year old while mother was at the office, Dr. Sanderson and her husband founded their own "Nursery Center," hired a teacher, and enrolled a maximum of eight children from three to five years of age. Recruitment was difficult, since most parents equated pre-school with pushing their children unnecessarily. An American teacher, Kay, was hired, who was instructed to talk with the children, read to them, tell them stories, and have them tell stories as much as possible. Daily lesson plans were provided—directed towards concept formation through the use of language and the development of enhanced awareness of self, of peers, and of environment.
Materials in abundance were made available—-toys of all sorts, including Playschool (many copied by local carpenters since Lahore is a long way from home); trays with compartments of cloth, of wood, of paper—-items with different textures, colors, geometric shapes; a record player, a tape recorder, and, on occasion, films. The children went through the house, more Western in design than most, and learned the names and uses for everything in it. They celebrated, many for the first time all the American "holidays." Halloween was special fun for they did nearly all of the planning and preparation for it. Since several were missionary children who might not leave the country for years, except for a few months on home-leave, they all participated in the Pakistani holidays. Parents were invited to join in with the various activities.

After nine months Kay went back to the Continental U.S., as reluctant to leave her charges as they were reluctant to have her go. The children of six entered LAS and new pupils were added to the Center. Her replacement was Anna, an Italian who had married a Pakistani in London where she had gone to study languages to become an UN interpreter and he had gone to complete his higher education. Because Anna was trained in the Montessori system, Dr. Sanderson turned the lesson planning over to her. The Lahore American School was awarded PL480 funds in 1962 which gave it more operating capital than from tuition and donations. With the imminent return of the Sandersons to the States, the pre-school would be disbanded. But the Nursery Center had proved so successful that it was voted to include it as the "kindergarten" for the regular school with Anna as its teacher. (And this vote is by a group of mothers who had been hostile initially to
a kindergarten--"pushing the child"--and to any but American citizens as teachers in spite of the fact that the school had students from many different countries whose parents were working in Lahore for government or private agencies.) It was children like Cindy who were dramatic proof that the system could and did work.

Following Dr. Sanderson's experiences in West Pakistan, she spent 1968 in Chiang Mai, Thailand. The country had come under martial law ten years before and, in a political move, the new General declared English to be the second language. In every hamlet and village, whether a trained teacher was available or not, English became part of the compulsory education program which ran from Grades One through Six. Since her husband was a Fulbright Lecturer at the University, Dr. Sanderson decided to try her hand at teaching English and speech in a Thai University. The English class consisted of 60 students who had ten years of experience with English in the classroom but few of the 60 could understand spoken English. The impact of this was brought home upon discovering one day that the unknown face in the audience was an interpreter a student had brought with her to help her understand what the class was doing. The students had been taught a linguistic approach to English as a second language--they hadn't reached the stage of writing compositions yet--and were using as a text E. Frank Candlin's Present Day English for Thai Students, Book 3, with a 1967 London copyright date. Since this text would be the basis for the departmental exam in the course, they struggled with it. It would have been a source of comfort to know that their unsuccessful bouts with the articles "a" and "the" were being shared and sympathized with by Francis C. Johnson.
in his "Failure of the Discipline of Linguistics in Language Teaching" address before the Third Annual Congress of the Linguistic Society of the University of Papua and New Guinea. The greatest surge of rebellion against the teaching system came during the section about "sentence patterns" and the use of prepositions. The text instructions were "at is used for small town and villages and the suburbs of large towns" . . . "in is used for large towns, counties or provinces, and countries." Example: "He has a shop at Worthing, a seaside town in Sussex." After this debacle, the oral language approach was used in the classroom. Daily blackboard drills in verbalization--spoken and written--of sentences related to Thai life were used. New words were played with--and both they and their referents were seen, smelled, and touched when possible--with as many choices of meaning as possible. Idioms were the most fun--taken apart, used, discussed, reused. Dialogues between instructor-student, student-student, student-small group, became part of the classroom routine. This would not help with that departmental exam and, while it perhaps sharpened their ability to communicate, it was probably doing a disservice to many of the Thai students who had to pass the final exam in the course with honors to become eligible for recommendation for overseas universities and colleges they wanted to attend. The in-class test scores were appreciably higher than on the first diagnostic exam. But as repeated letters, conferences, etc. with the Dean and Department Chairman promised no changes in the nature of the critical examination, the struggle of an American professor teaching from a British text using the oral language approach with communication outcomes but little evidence of an appreciable gain in
the desired grammar skills became a matter of conscience. How was it for the German, Spanish, Thai, and French professors who were also teaching this course called "English"? As one linguist who had spent many years in Khon Kaen (another outlying area) said in the debriefing session before the Fulbrighters left Thailand—"In ten years the language being taught here as English will be a completely different language that no Englishman or American will be able to understand, especially in its spoken form."

An oral language approach supplemented with training in sensory awareness involving all the media at their disposal might have been one way of bringing the involved cultures closer together.

It was with the conviction that the sensory awareness oral language approach was the way to go in language development that Dr. Sanderson explored her new task in 1969-70 at Ohio State University of writing study guides for a series of educational films called Access to Learning. The two films The Teacher as Storyteller and Oral Language--Breakthrough to Reading presented the theories of the program and visualized some of the activities through which these theories were actualized. The series of films emphasized language development and its relations to the structuring of the thought processes. The films were started as the documentation of a project for the purpose of disseminating information and as part of the final report which goes to Washington for any of the Title I (Elementary and Secondary Education Act) funded projects.

The project was started in 1966. During the 1940's, 40 percent of the population of Columbus centered on 20 percent of its land mass. This was known as the "inner-city." In 1966, 63,000 of the 200,000 were children; 43,000 of those over 25 had only 8 years of education. Statistics from 1966 indicate that 83 cents of every welfare dollar was spent in this area. Some way had to be found to meet the educational needs of this most valuable resource--the people.
The program for language development was the approach of the Columbus (Ohio) Public Schools to the challenges of instructional improvement.

For those who have not seen the film Oral Language which was part of the workshop held yesterday for the "Speech in Early Childhood and Elementary Education Interest Group" or who have not received a study guide for the film, a section of the guide with slight modification will be presented here.

Many children begin school—whether it be pre-school, kindergarten, or first grade, at a disadvantage. They are not prepared to speak or to understand the verbal and non-verbal language of the classroom. Their sensitivity and perceptiveness are limited by their backgrounds and experiences. For many, entering school is equivalent to entering another culture with a new language, new mores, new values, new standards. Their opportunities for success are limited by their abilities to handle the language and the concepts they find in the classroom.

To bridge this gap between home and school, the children [in this program] were involved in a variety of activities. Following first-grade they took part in a six weeks experimental language development program based on the "multi-sensory," "oral language" approach. An art teacher, music teacher, physical education teacher, and a language teacher worked together to heighten the sensitivity of the child to the multitude of stimuli around him, involving him in his environment, and leading him to express this new awareness of his world verbally, first orally and then written.

Through the four rotating groups—language, art, music, and physical education—the child is guided through a variety of activities designed to stress self realization. [Who Am I?] In another series of activities, the child considers "What Would I Like to Be?"
All of this is aimed towards language development. The child becomes familiar with the sounds of his new "sub-culture" which may well be very different from his own; he becomes familiar with new words; he becomes acquainted with the syntax of language he will be expected to learn and to follow and unconsciously he learns to assimilate this as part of his new language; he moves from this to an understanding of visual symbols and the reading and recording of them. The child becomes a more sensitive individual--more aware of self, of others, of his environment. The gap between what is and what could be in life is bridged as children realize their potential.

Oral language becomes truly a breakthrough to reading and a breakthrough to a fuller, richer self-concept.

The program worked. The children involved in the projects entered their winter school programs with more assurance than before. But objective data was something else again. The focus in training had been on experiences and communication outcomes but the skills tested were those measured by the language skills section of the Metropolitan Achievement Battery and by the California Reading Tests, with no significant difference between the students' winter and summer scores--the upper range the same, the lower range a little higher. The Wepman Auditory Discrimination Test yielded significant results with every child scoring at the mean. The Frosting Development Test of Visual Perception was also administered. The children were reported as having difficulties with the mechanics of taking tests. After checking the specified outcomes as listed in the book published for teachers in the winter program and checking the specified outcomes which a multi-sensory oral language program can logically produce, the incongruity can be seen. The tests that were administered did test for what was expected but not for what was taught. Those measures of language which are acceptable to linguists are scarcely those which predict use of language in real time to achieve various communication outcomes. The former predict knowledge of syntactic rules rather than
situational use; they predict a lexicon rather than rates of accessing from it in various types of communication situations. In essence, these language measures predict what people know rather than what they can do in real communications between themselves and people other than linguists. It is like measuring a woodworker's productivity by seeing if he knows the difference between bandsaws and jigsaws. He may use each beautifully, but he has never consciously compared them. Language tests are measures, not only of how conscious one is of his communication behaviors, but how conscious he is of the language he uses in those particular ways in which linguists choose to look at language. It is quite possible that the ability of children to communicate with other children and with teachers from a plurality of backgrounds may be related negatively to their language test scores.

With an evaluation program aimed for productive communication testing, the results of the program in terms of intent might have been demonstrated objectively. A multi-media approach was suggested by Dr. Sanderson but a set-back in funds prohibited the evaluation from being done in 1970. The multi-media approach suggested involved the use of the tape-recorder, video-tape, and motion-picture film to record data which would then be evaluated by semantic differential and content analysis to check on the semantic and syntactic development and on assertions made by the child, verbally and non-verbally, involving the use of the senses (visual, auditory, gustatory, olfactory, organic, and kinaesthetic).

IV

What is so delightful about the multi-sensory approach to language development is that the child is striving to learn more, rather than
striving to learn what one of his cultures accepts that the other rejects, and vice versa. Through this increased awareness of self as a human being in his own right and through his identification with his peers, teachers, and activities, he masters a language in harmony with the task-oriented world of school. But this is not the bilingualism to which linguists refer. It is the polylingualism that you and I possess when we shift effortlessly from talking to peers to talking with superordinates, or from persons of one sex to persons of the other, or from talking with adults to talking with children. None of us has ever had to study how we communicate differently in each of these situations, but it is obvious to all of us that we behave differently to communicate in every case, and both our lexicon and our syntax are different as we shift, say, from making love to making money. But we are not able to make these shifts so effortlessly because we have been taught the differences among these different dialects, or because we have been trained formally to comprehend each dialect. One does not need to compare worlds to cope in each world according to those rules we infer to explain its outcomes. The multi-sensory approach is a focus on experiences found in the world of academe together with the academic language that we use to refer them. It involves communication about those experiences, both as sender and receiver. It is neither language-as-language nor experiences-as-experiences, and it is not cognitions about language, but it is communication behavior involving academic kind of experiences.

Dr. Paul Heinberg, the male author of this team, draws a distinction between Standard English which refers to "general language characteristics
of a large population of communicators" and National Speech-Communication
which refers to "behavioral contingencies in the process of interaction
between specific persons in specific types of situations."

Standard English is considered to be the dialect many speakers
command; to the extent that national speech-communication refers
to dialects, it includes a large plurality of dialects that are
more dependent upon characteristics of the communication situation
than upon characteristics of the communicators. Moreover, a person's
relative command of Standard English is an assessment of his linguis-
tic competence; a person's relative ability in national speech-
communication is an assessment of his performance in various types
of specific situations. Standard English refers to one's cognitive
knowledge of rules of performance; national speech-communication
refers to one's behaviors, regardless of the degree of his cogni-
tive knowledge of any rules he may adhere to in his performance.
And the assessment of degree of command of Standard English usually
involves a paper-and-pencil test of language in which the time allowed
for each response is usually not controlled. Tests of competence
in Standard English, therefore, tend to be better predictors of
scribal (written) communication behaviors than of speech-communication
behaviors. When the time allowed for each response is more controlled,
the assessment more accurately predicts speech-communication behaviors
and less accurately predicts scribal communication behaviors.18

Each child regardless of his culture or sub-culture should have at his
disposal choices of language strategies which he might employ to achieve his
intended or desired communication outcomes as well as those expected of him
by his teachers, peers, and the outside world. Our focus on communication
experiences and communication outcomes with a systems-is-valid approach
should afford him these choices.19
1Division of Special Services, "Enrichment Unit: An Approach to Instructional Improvement," A Component of the Title I (ESEA) Program of the Columbus Public Schools, Columbus Ohio, for the 1967-68 school year. (mimeographed), pp. 2-4.


10Sanderson, Sarah. Access to Learning, a series of four study guides for four educational documentary films--Enrichment Unit, Oral Language--Breakthrough to Reading, The Teacher as Storyteller, and A Lesson on Change, Columbus (Ohio) City School Distric under Title I (ESEA), May, 1970.

Thus far, there are five films in this unit. The five films now released are:

Enrichment Unit: A Strategy for Instructional Improvement explains the administrative structure of the plan in which three or four classroom teachers are teamed with an enrichment teacher. The film clarifies the rationale and the goals of enrichment teaching in respect to language instruction by following the enrichment teacher through a variety of her activities and duties. (28 min. Color, sound 16mm., Rental $11.50, Sale $220.00) Film Awards: Chris Award, Columbus Film Festival.
Oral Language: A Breakthrough to Reading describes a six-week language development project demonstrating how four teachers, through a coordinated curriculum, use their special skills in music, art, physical education, and language to develop each child's ability to communicate his thoughts and perceptions. (24 min., Color, sound. 16mm. Rental $11.50. Sale $220.00) Film Awards: Gold Camera Award; Industrial Film Festival; Blue Ribbon Award, American Film Festival; Chris Award, Columbus Film Festival; Film Award, Chicago International Film Festival.

The Teacher as a Storyteller features Dr. William Martin, noted Storyteller, educator, and author of children's stories, who explores the child's comprehension and related language development. (21 min. B/W, sound, 16 mm. Rental $8.00. Sale $110.00).

A Lesson on Change is a cinéma vérité recording of a teacher's spontaneous explanation to her second grade class of Dr. Martin Luther King's death and the changes for which he gave his life. (12 min. Color, sound, 16mm. Rental $8.50. Sale $100.00) Film Awards: Chicago International Film Festival; San Francisco International Film Festival.

Access to Learning depicts classroom activities directed toward providing opportunities for improving and practicing skill in thinking--comparing, classifying, generalizing, and inferring. (25 min. Color, sound 16mm. Rental $11.50. Sale $250.00)

12 Sanderson, Sarah E. "The Story of a Film Series," Audiovisual Instruction, April, 1971.
14 Sanderson, Sarah E. Interview with Calvin Smith, Evaluation and Research Department, Columbus Public Schools, Ohio, May 7, 1970.
17 Sanderson, Sarah E. Letter to Calvin Smith, Evaluation and Research Department, Columbus Public Schools, Ohio, May 18, 1970.

Smith, Calvin. Letter to Sarah E. Sanderson, Columbus, Ohio, May 25, 197