WHAT makes a book, a film or a live fireman instructional material? What makes particular material of special use to the disadvantaged?

The disadvantaged are often defined operationally as those less predisposed, than some equally vague group of “others,” to benefit from school programs. The causes of this condition are usually attributed to inadequacies at home—e.g., few material goods, sensory deprivation, a lack of basic information about the world, an absence of successful adult models, and inadequate amounts of loving care. For older children, the school program, with its overemphasis on reading and on abstract content, is often cited as the source and perpetuator of its own problems.

Given such assumptions, it is easy to understand the present search for preschool materials to replace what youngsters have missed. If they lack commodities—things, pictures, noises, smells and even body warmth—then these materials are sought out and provided. For those already in school the causes of disadvantagement become subsumed under the rubric “underachievement” and the search for materials becomes a grasping at systems—i.e., approaches guaranteed to teach basic skills, notably reading, to all but the most severely disturbed or retarded. Once we have exposed our assumptions about what puts certain youngsters at a disadvantage in school, the materials, media and methods we seek are predictable.

A cohesive view of the disadvantaged should include theoretical underpinnings from which to derive action programs.

Actually, experts in human development hunch that lower-class children are likely to be exposed to even more stimulation than middle-class children.1

Researchers also have suggested that there is no evidence of real differences in rate of development during the first two years, when such differences in stimulation would have to occur to have a lasting impact on development.2

The source of much of the impetus for the sensory deprivation approach comes from those who emphasize superficialities—e.g., the inability of many youngsters to attend to the teacher's voice. But whether couched in terms of scholarly research efforts to explain the neurological development of infants, or programmed into tape recorders to help four-year-olds pick out the teacher's voice in a noisy classroom, sensory deprivation is an insufficient explanation.

Perceiving disadvantage as an absence of concrete and life experiences can result in a shallow emphasis on field trips, color cards and geometric blocks. But just as scholars offer little, beyond their conflicting opinions, regarding which concepts are "keys" to their disciplines, psychologists can suggest little regarding which concrete and life experiences are critical to normal development. When is lack of knowledge or experience merely ignorance and when is it the cause of subsequent and cumulative retardation in the ability to form concepts? Teachers indicate more pervasive and lasting benefits for children who learn to use "or, but, how, if and when"—in any content area—than any information gained from scurrying-around on field trips.

Bereiter makes the most cogent argument for deemphasizing the lack of concrete experiences as the causal explanation.

Blind children, on the average, show little or no intellectual and academic deficiency, whereas deaf children are typically about ten points below normal in I.Q. and show gross inadequacies in academic achievement. ... this finding may be interpreted as meaning that deaf children are culturally deprived in much the way that lower-class children are deprived, regardless of their home backgrounds. It would appear from this that social class opportunities for concrete experiences either do not exist or are not important, whereas lack of opportunity for language experience has serious effects that closely correspond to those found in cultural deprivation.

My basic assumption is that those who are less able to move from the social uses of language to the levels of conceptualization and transmission will be disadvantaged in schools and in American society generally. Bernstein's formulation of how linguistic codes can trap children into self-perpetuating restrictions, or propel them into lifelong elaborations, provides a basis for both understanding and planning programs for the disadvantaged.

The suggestions for materials which follow derive from this belief that adding to children's language codes should be the critical purpose of special programs.

An Approach to Materials and Experiences

I recently had two opportunities of working with six-year-olds. On an individual basis, I took children who had not yet spoken in school or who were speaking in very restricted, limited ways to do the following:

feel carpets

taste fruits and vegetables


—visit a motel swimming pool
—throw rocks into Lake Michigan
—steer my automobile around a vacant field.

As a group, using private cars, we took a whole class of almost nonverbal six-year-olds to visit a suburban school. The children observed classroom activities, displays of children’s work and physical facilities.

While there is much to criticize in these activities, I found that using these materials and experiences stimulated the youngsters to talk more than ever before. They were encouraged to describe and react, and even more, to compare, contrast, explain and summarize. We began with no commitment to any material or subject matter but with a behavioral objective—to get youngsters to express and to share ideas.

Once children reach the age when teachers feel pressured to teach reading, the search for materials often deteriorates into a search for a systematized reading program. While no reasonable person is against the teaching of reading, the critical question is the degree to which each child will have a hand in expressing his need, his readiness, his way of learning. Those who understand the nature of development and the struggles of the disadvantaged, recognize that language development is broader than reading and that intellectual development is more pervasive than the ability to call the written word at the earliest possible age.

Representatives of private industry, foundations, publishers and funding offices of government, have introduced the concept of “teacher-proof packaging of systems,” to indicate their search for materials which will guarantee the teaching of reading by even the least able teachers. Field tests report the notable success of using S.R.A., Lubach, i/t/a, Sullivan, Words in Color, The Detroit Series, The Bank Street Readers, pocket books and local ethnic newspapers.

It is difficult to deny this “evidence” on the basis of feelings and hunches of classroom teachers. Yet it seems to me and to those who make detailed analyses of all materials for teaching the disadvantaged, that there is no ultimate system for teaching reading or anything else; that what is needed is a variety of approaches and materials in each class.

The interests, predispositions and learning styles of youngsters can help them to select materials. While there is no best material for all, there are better materials for individual pupils—and the “better” materials are those which pupils and teachers help to select and control.

Although the availability of certain kinds of materials in the classroom is a necessary part of a program for intellectual development, neither the existence of certain pieces of equipment in the room, nor the development of specific kinds of experiences will guarantee maximum intellectual growth in the children. This can only be accomplished by the teacher’s synthesis of a variety of experiences and the use of many kinds of materials concentrating on specific learning.


The School Learning Center

One effective approach to developing and using materials with the disadvantaged is the creation of a learning center. Since this approach involves three full-time teachers using three classrooms to cover only two teaching loads, it may very well be that the significant factors that have been added are teacher time and attention. But the addition of a listening center, films, pictures, filmstrips, records, transparencies, science materials, language kits and a variety of additional materials seems to be part of what is making the difference.

Youngsters are not plugged into systems with "no-exit do-loops" but work with materials in small groups and on an individual basis. Materials are prescribed for and chosen by youngsters. This may sound like a mushy, poorly controlled approach but recent research is supporting many of our experiential beliefs. A recent study of over 600,000 youngsters indicates that the disadvantaged feel helpless—and that this perception of powerlessness is not removed by innovations which others initiate.

It appears that variations in facilities and curriculums of schools account for relatively little variation in pupil achievement as measured by standardized tests. . . . A pupil attitude factor, which appears to have a stronger relationship to achievement than all the "school" factors together, is the extent to which an individual feels he has control over his destiny. . . . Minority pupils, except for Orientals, have far less conviction than whites that they can affect their own environments and futures. When they do, however, their achievement is higher than whites who lack that conviction.*

If feeling powerful is central to what the disadvantaged learn, then what better means for building in feelings of control over their environment could they have than participation in the selection of materials?

Real vs. Fake Materials

As part of the learning center described here, we tried two experiences that have implications for determining what causes certain materials to be effective. First, we tried to involve some fifth graders in a unit that would talk about their interests and self-perceptions by having them fill a nonexistent time capsule. We told them that people would dig this capsule up in the future and learn all about them—provided they stocked it with pictures, songs, stories, tapes and whatever they wanted to use in order to preserve themselves for posterity. There are many good reasons why the children did not become involved in this unit, but one of the better explanations is that there was not really a capsule being sunk into the school yard.

The second attempt at getting the pupils to describe themselves, was to have each youngster write something on a card, place it into his own special balloon and allow it to float away. The balloons went for hundreds of miles and came down in eastern U.S. and

Canada. As a result, the pupils received real letters asking for more information about themselves, their activities and their community.

This example supports what we all know; that 10-year-old youngsters deal more easily with the real than with the imaginary and prefer to be in the present rather than in the future. It also suggests that materials which are authentic will involve pupils. It is the need for honesty rather than merely concreteness that is the critical element. The time capsule was a contrived experience but the balloons were real.

A Centralized but Teacher Controlled Materials Center

Another materials program that seems to work effectively is a centralized materials center which caters to the needs of particular teachers and classes. Individual teachers can literally receive crates of materials containing books, pictures, films, filmstrips, objects, transparencies and other materials organized around some unit of study.

This means that available material has been organized around some topic and drawn together, rather than separated on the basis of whether the material is a film, a book, etc. The real values of such a program are that each teacher can receive several crates of materials each week and keep the material for a full week to use at the most opportune time. But even more, individual teachers can and do request the purchase of new materials and the discarding of outdated materials—and have their advice acted upon.

The most efficient such materials center I have visited is in Racine, Wisconsin. Here an interview revealed:

- Teachers of the disadvantaged have markedly increased their requests for materials in the past few years.
- Materials used by teachers of the disadvantaged are soon requested by all other teachers.
- Whereas the main source of new materials for the system used to be the needs and recommendations of teachers in suburban-type schools, the teachers of the disadvantaged have become the source of introducing materials into the district.
- The drive for new materials is greatest among classroom teachers and more common among consultant supervisors than building principals.
- The teachers of the intermediate grades make the most requests, but primary level requests are catching up.
- Secondary teachers make few if any requests for materials and seem to rely on an occasional film and texts.
- Film ordering and use have leveled off and requests for a wider variety of materials have become more usual.
- The multi-media approach, including tapes, strips, transparencies and slides, has replaced the overdependence on films.*

The director of this center indicates some outstanding strengths of this approach to be: the on-going ordering which enables teachers to make requests for new purchases at any time in the school year; the multi-media materials included in the crates; and the fact that while social studies, language arts and science are the most popular content areas, art and music materials are being requested more frequently. It is also noteworthy that since teachers explain their problems when they call

* Conversation with William D. Grindland, Director, Instructional Materials Center, Racine Public Schools, Racine, Wisconsin, December 1966.
up to place orders for materials, they are revealing decreasing amounts of prejudice and an increased understanding of the disadvantaged. It may seem like hairsplitting but when teachers change from seeking materials that will force or guarantee learning for all, to the requesting of materials for eliciting individual development, this would, I believe, indicate a change in their influence on pupils.

The key organizational point in this example is that in a system covering 40 schools and more than 1200 teachers, centralization is used as a force for individualizing teacher requests. Some believe it would be better for each school to duplicate miniature centers. Actually the economies effected by one main but efficient depot enable the center to have the means to be responsive to individual teacher requests. Finally, this approach has resulted in a large urban system's not having to rely on packaged systems or "teacher-proof" materials. Rather, this approach has created a situation in which individual teachers are requesting ever increasing amounts of more varied materials.

And So . . .

We now, I believe, have had sufficient experiences with gadgeterial seduction, with packaged teacher-proof systems and programs of step-by-step control of materials, as means for involving and teaching the disadvantaged. We seem to be entering a more professional phase in which the differentiation of pupil activities is once again becoming accepted as the critical criterion of teacher effectiveness. In order to execute such differentiation, each teacher needs a variety of materials which he can help the pupils to mediate and control on the classroom level.

Computers have been proposed as the ultimate media for reaching all youngsters. Yet while computers may individualize instruction in the sense of differentiating tasks, they cannot personalize. If our assumptions that a variety of language forms and the power to help shape one's situation are the most critical needs of the disadvantaged, then plugging people into walls may be a cure-all for a nonexistent disease.

Living and learning are synonyms and all the "stuff" of life is instructional material. The development of thinking processes neither precedes nor follows language development but occurs as an oscillation; new terms trigger new relationships which lead to other words for handling new concepts. All youngsters need to develop a language that will go beyond immediate social and material needs to usages that will help them to share ideas, control their own behavior and engage in the processes of thinking.

Materials which foster growth of multiple language forms—in a variety of content areas—are of particular benefit to the disadvantaged. But language is not merely a tool and improving the language of the disadvantaged is not simply to facilitate learning in the rest of the curriculum. Quite the contrary, the curriculum, its materials and experiences, is the instrumentality for teaching a variety of subject matter languages in their several forms.

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