The success of educational programs is often determined by the coincidence of the testing instruments with instructional procedures and program content rather than by the actual performance of adults and children in the classroom situation. Standardized achievement tests, which are the principal instruments used for assessing program effects, present particular disadvantages for open classroom models because of the sequence of skill development implied in the test format, the construction of items, and the content of the items. These instruments and others available do not tap the major objectives of open classroom programs. The roster of objectives for open educational programs include several in the areas of socialization and problem solving which are central to the dynamics of the program, but, at present, do not allow for the establishment of specific measures of program effects. A description of the interaction of elements within an open classroom model is presented as a total system in which the assessment of process assumes a more important function than assessment of products represented by the concept underlying standardized achievement tests. Dimensions which show promise for assessment of program effects in an open system are discussed. (Author)
Rationale

The Bank Street program has been referred to as a "developmental-interaction" approach to education.

"Developmental refers to the emphasis on identifiable patterns of growth and mode of perceiving and responding which are characterized by increasing differentiations and progressive integrations as a function of chronological age. Interaction refers, first, to the emphasis on the child's interaction with the environment--adults, other children, and the material world--and second to the interaction between cognitive and affective spheres of development. The developmental-interaction formulation stresses the nature of the environment as much as it does the patterns of the responding child."1

The educational program which rests on this theoretical foundation is characterized by individualization and various degrees of flexibility in curriculum development and sequence. This approach is in sharp contrast to the type of program characterized by a predetermined and inalterable curriculum sequence. In the latter program, performance criteria reflect expectations which are established as a consequence of the interaction between curriculum sequence and rate of progress.

Within the Bank Street Approach, program evaluation, to be effective, must yield information about the characteristics of performance which, in turn, can be used formatively as a basis for program development. In the other type of program, performance characteristics are predetermined by the nature of the instructional materials.
Kohlberg and Mayer have discussed the basic dilemma which is introduced into programs similar to Bank Street when achievement tests are used to measure educational objectives.

"From the ethical or philosophic point of view, the use of achievement tests to measure educational objectives rests on a compounding of one type of relativism or another. The items composing an achievement test do not derive from any epistemological principles of adequate patterns of thought and knowledge, but rather represent samples of items taught in the schools... There is no internal, logical or epistemological analysis of these items to justify their worth..." 2


Since the beginning of Follow Through, Bank Street has been developing a program analysis system which is designed to provide formative evaluative information that can be used for program development. Two observation systems as well as a series of diagnostic tools have or are being developed.

The purpose of the analysis system is to provide information about the characteristics of performance which, in turn, will allow for analysis of the results based on the logical and epistemological principles underlying the program.

While the system provides evaluative information, it also provides classroom performance data that can be used to describe the child's level of performance relative to the developmental and interactional scheme of growth that underlies the program.
Following are selected aspects of child behavior which are of central concern for program development within the framework of the Bank Street program.

1. **The structural organization of the child's knowledge.** This refers to the differentiated and integrated quality of the child's thought processes. For example, in the Social Studies area of the curriculum, are the children able to specify the complex relationships which underlie the organization of a society? (e.g. What are the steps between growing food and buying it at the local store and how does that affect the price charged as well as the availability of the commodities? What are the conditions on the life styles of the people?)

2. **The modes of representation that are available for expression of knowledge.** How articulately can a child communicate using three-dimensional, two-dimensional pictorial and formal symbolic modes? More importantly, how can the child represent concepts simultaneously through the modes?

3. **The personalized quality of the child's knowledge.** How available are personal experiences which the child can use to identify with a situation and reason through the ramifications of the situation? For example, in an interview centering on social studies, an important dimension of the analysis is the extent to which children associate their personal experiences with the picture. In terms of the spatial and temporal limitations of children's thought at this age range which has been described by Piaget, this is an index of the child's ability to structure his thought processes by associating and projecting personalized time-space patterns on a situation and, subsequently, extending his understanding beyond the personal level.
4. The child's ability to make inferences and hypotheses based on his understanding (through identification with personal experience) of a problem and consideration of the constraints inherent in the problem. One illustration of this is often found in the dramatic play encouraged in Bank Street classrooms. For example, if a group is studying about an American Indian culture, they might put together a play about a phase of life within that cultural context. The educational goal of the play is to integrate all the aspects of the culture which have been studied into a dramatic illustration. The degree of authenticity is the measure of the child's understanding of the culture. For this age range (6 to 8) the play is the equivalent of the presentation of a "sociological" study. The simultaneous use of bodily gestures, three-dimensional replicas of culture artifacts (which have been made by the children), two-dimensional pictorial representations and language to summarize and communicate is an example of the construction of an elaborated and differentiated time-space pattern around the study of a culture which has never been experienced first-hand. It is the transitional stage between learning from a personal life experience bounded by temporal and spatial constraints to learning through vicarious participation.

5. General information children have about the purposes and processes related to the functions of persons and objects in his world. This refers to the range of evident knowledge which reflects children's awareness of the multiple roles a single person might play in the normal course of life (e.g. mother, wife, doctor, teacher, housekeeper) as well as the competencies for each role and the tools which enable the enactment of the role.
Additionally, it refers to a more general knowledge about the functions of objects such as machines (e.g. trucks, busses, automobiles, etc.) and the relationships of these functions to meeting human needs within an elaborated social organization.

6. **Language ability of children.** This includes the children's ability to use language in a specific manner to differentiate and elaborate these ideas and feelings as well as a measure of the range of vocabulary available to children to describe and label objects which they have had experience with.