

## Low-Income Children's Preschool Literacy Experiences: Some Naturalistic Observations

**Alonzo B. Anderson**

**William H. Teale**

**Elette Estrada**

*Laboratory of Comparative Human Cognition  
University of California, San Diego*

Our current work is aimed at characterizing the preschool literacy experiences of children from low-income families and communities. As several authors have suggested (Forester, 1975; Goodman and Goodman, 1979; Rubin, 1977; Shuy, 1977; Griffin, 1977), literacy may be viewed as an extension of oral language development. From this perspective literacy exists in the domain of communication and social interaction. For young children, then, developing literacy involves adding "new ways" to transmit and receive meaning through social interaction. We assume that the acquisition of these "new ways" is guided in some fashion.

Our approach to understanding the development of literacy begins with a detailed description of the immediate social environment of the child. We are especially interested in how this environment organizes the child's activity and how the child operates within that organization. Our focus for the study is on literacy events that occur in everyday family and community settings.

Our description of the literacy environment includes at least: (a) a detailed description of the print materials available to the child; (b) a description of the people and social activities involving the child where these print materials exist; and (c) a description of how these people use print as a part of their ongoing activity. Literacy events both within and outside of the home are taken into account. We shall discuss what is meant by a literacy event more fully below; however, for now we nominally define it as *any action sequence, involving one or more persons, in which the production and/or comprehension of print plays a role.*

The sample for our current study includes twelve low-income youngsters (six whose ages at the outset were 2 years 6 months and six whose ages were 3 years 6 months) and their families. The sample consists of three ethnic groups (Black, Mexican-American, and Anglo) with four families representing each group. At the beginning of the second year of the study twelve new families will be drawn from these same groups.

The twelve families presently participating in the study have the following characteristics: the annual income of each family is estimated to be below \$10,000; none of the adults has earned more than a high school degree (the average years of schooling completed is 9.3);

both the mother and father are present in all the families; and the size of these families ranges from four to seven people. Seven of our target children have older siblings, four have only younger siblings, and one is an only child.

As mentioned above, the focal point of our data collection is the literacy event. In order to operationalize our earlier definition we must establish at least a minimal definition of reading and writing. For purposes of our observations and analysis we have defined the terms *reading* and *writing* quite specifically. First, in the traditional sense a reading event will be taken to be any occasion upon which an individual comprehends (or attempts to comprehend) a message encoded in graphic signs. In a like manner a writing event will be taken to be any occasion upon which an individual mechanically manipulates appropriate tools to produce (or attempt to produce) graphic signs representative of oral speech which have meaning to the producer and/or to anyone who might be a reader of those graphic signs. Thus, a literacy event is deemed any occasion upon which an individual alone or in interaction attempts to comprehend or produce graphic signs.

None of the 2 to 4-year-old children in our sample is presently capable of reading or writing in a formal sense. We wish to capture those events which are precursors of this capability. Therefore we look for events in which the child interacts with objects as if s/he is reading or writing. That is to say, if the child "reads" a story or sign or whatever (even though what the child says may have little or no relation to the graphic configuration present), we consider this a reading event. In essence we have expanded the notion of reading and writing to include any reading- or writing-like behavior which mimics components of the activities that are generally considered reading and writing.

We are attempting to adapt and create methods which will allow us to collect and analyze relevant data about the acquisition of literacy in three ways: (a) natural observations, (b) self-report (daily diaries produced by primary caretakers), and (c) controlled behavior sampling.

The natural observations provide us with some idea of the family and community contexts within which literacy events occur. We hope to use them to discover cultural factors controlling the context and frequency of literacy experience.

The self-reports tell us how parents define literacy events by providing us with descriptions that are not constrained (in any direct way) by our expectations. We want to find the features of literate events common to all groups as well as those which may be unique to each.

The controlled behavior samplings present a set of literate experiences common to all subjects in the study. The children's behaviors in these situations provide us with information about cultural diversity in response to stimuli that, in the social science literature, are considered central to the development of literacy.

### Natural Observations

Each family in the study is the subject of four hours of observation per week, and we rotate our observations through all phases of the day and all days of the week. (Such a procedure corresponds to the "spot observations" employed by Whiting, Child, Lambert (1966) and others (see Rogoff (1978)).

Once a literacy event has been identified we attempt to describe activities which lead up to it, events subsequent to it, and any activities which co-occur or alternate with it. And of course, we seek a detailed description of the event itself. From such a description we hope to be able to draw conclusions about the contexts which give rise to literacy events and to determine if these contexts vary according to cultural groups.

We have found it useful during our first six months of observing to classify the print and print-related activities which our preschoolers are exposed to into several categories so that we can draw some general conclusions about the nature of these events (e.g., the participants, media/materials, and activities involved). For instance, print may be present in the home (books, labels, calendars, etc.) or outside the home (signs, billboards, etc.). Print-related activities may involve the child alone (writing/scribbling, looking at a book, watching TV) or in interaction with someone else (being read to, mimicking the writing of a parent or older sibling). The child may be an active participant (as in the previous examples) or an observer (watching a letter being written or the mail being read). Tables 1 and 2 summarize the types and frequency of literacy activities that have gone on in the homes of our research participants during the first five months of observation.

A quick glance at the tables suggests that there is a difference in the pattern of literacy activities as a function of ethnic group. Indeed,  $X^2$  analysis performed on these frequencies (all  $<.005$ ) generated from observations indicates that literacy activity and ethnic group membership are not independent. Closer examination of the proportionate distribution of reading activity suggests that Black parents read to their children less than might be statistically expected, while Anglo parents seem to read to their children more than might be statistically expected. This apparent difference is virtually eliminated when we look only at diary-reported frequencies. Also of interest is the relative low frequency Mexican-American parents were observed to read alone.

The most notable observation regarding writing activity is that Anglo target children and caretakers spend a comparatively large amount of time in "writing" activities, while Mexican-American youngsters spend less time than might be statistically expected working alone in writing activities.

These observed frequencies should be treated with extreme caution. They are preliminary observations organized within an evolving classification system. Several types (categories) of events are not included, e.g., electronically mediated events (watching Sesame Street or

**TABLE 1**  
Total Number of Reading Events and Total Minutes Spent in Reading Activity for Five Month Time Period

|                        | Ethnic Group |         |            |         |        |         |
|------------------------|--------------|---------|------------|---------|--------|---------|
|                        | Black        |         | Mex. Amer. |         | Anglo  |         |
|                        | Events       | Minutes | Events     | Minutes | Events | Minutes |
| Participants           |              |         |            |         |        |         |
| T.C. Alone             | 19           | 42      | 21         | 178     | 14     | 110     |
| T. & Adult             | 9            | 70      | 11         | 158     | 28     | 266     |
| Adult Alone            | 15           | 148     | 5          | 31      | 18     | 75      |
| Total Minutes Observed | 6129         |         | 10008      |         | 7350   |         |

**TABLE 2**  
Total Number of Writing Events and Total Minutes Spent in Writing Activity for Five Month Time Period

|                        | Ethnic Group |         |            |         |        |         |
|------------------------|--------------|---------|------------|---------|--------|---------|
|                        | Black        |         | Mex. Amer. |         | Anglo  |         |
|                        | Events       | Minutes | Events     | Minutes | Events | Minutes |
| Participants           |              |         |            |         |        |         |
| T.C. & Adult           | 9            | 37      | 3          | 7       | 23     | 268     |
| T.C. Alone             | 9            | 34      | 10         | 83      | 17     | 226     |
| Total Minutes Observed | 6129         |         | 10008      |         | 7350   |         |

the Electric Company on TV) and those which involve participants other than an adult (like an older child). Also excluded is any consideration of the type of material the activity is organized around. Certainly an approach which sacrifices a qualitative analysis for a quantitative analysis raises many more questions than it answers. In fact, its real value in this research has been to generate several alternative explanations for the observed frequencies and thereby suggest additional directions for continued data collection. Some of these alternative explanations include (a) the availability of human resources in the environment (presence or absence of older children or other more skilled members of the environment); (b) variation of more skilled members' conceptions of the instrumentality of literate activities; (c) literacy demands of parent's job (which may or may not carry over into the home); (d) prior literacy training and/or the literacy level of the parents; and (e) a discontinuity between values associated with literacy and the actual daily activities related to literacy. As the work progresses we shall continue to examine how these and other factors affect the frequency of literacy events in each child's life.

In addition to our documentation of print and print-related activities in the environments of our total sample of children we shall eventually look at these factors as they apply to individual children in order to determine if certain forms of print and activities are especially salient or not salient for particular children. Finally, once we have a more thorough documentation of representative events (described as discussed above), we shall look across these to compare, contrast, and better understand the process — as well as gain insight into intervening variables.

Given the number of questions raised by a quantitative analysis, one might doubt that there is any value of this type of analysis. We think, however, that it is the combination of quantity *and* quality of interactions involving print material that guides the acquisition of literacy, and thus we are seeking a systematic description of both.

### Literacy Event Analysis

In addition to noting the types of literacy materials in the children's environment and describing in general terms the situations in which the child and others in the home are involved in reading and writing, we are conducting detailed analyses (micro-analyses) of particular literacy events. These micro-analyses permit us to examine the ways in which the social environment organizes and conducts literacy events for the target child. The analyses are of central importance to the study because they reveal the dynamics of the literacy environment and serve to suggest hypotheses for future investigation and to sharpen the skills of the researchers on the project. The following is a shortened version of one such micro-analysis which shows the way in which these analyses are performed, and the types of information we are obtaining from them.

#### Literacy Event R<sub>1</sub>

Researcher arrives at 9:30 a.m., sits on couch in the living room. Present in the house are the father (F), mother (M), a target child (D) aged 3-9, and the target child's 18-month-old sister (K). At approximately 10:20 F 'settles' into his chair in the living room after completing a repair of the television. He talks with M who is in the kitchen fixing breakfast and with the researcher. (The actual remarks between F and the researcher were not noted; however, they could be characterized as general chit chat.) Beginning at 10:25 a.m. the following takes place:

- (001) F: (to D who is in the kitchen) Did you ever show [researcher] that whole book you can read?  
 (002) D: What book?  
 (003) F: *Toys in. Things in My House.*  
 (004) D: I don't know.  
 (005) F: You read it except for a couple of words.  
 (006) D: Yeah.

- (i) [D comes to living room, F looks around living room for book].  
 (007) F: Here it is. (has *Things in My House*)  
 (008) D: (takes book from F, goes to couch, sits down) Here it is (to researcher).  
 (ii) [F sits on couch to left of D, puts right arm around behind D on couch. F holds book with left hand, D with both hands. D opens book to first page (title page) then begins to turn to first of text. F stops him].  
 (009) F: We have to start reading here. What's this say? (pointing to words of the title moving from left to right direction.) Things in ... ? (waits approximately three seconds) Things in My House. (turns to first page of text)  
 (010) D: A shoe. (pointing to picture on the bottom of the page)  
 (011) F: No, we have to start up here at the top (points to first word of sentence at top of page). [in reading prosody] There are all kinds of things in my house. A ...  
 (012) D: ... things ...  
 (013) D: ... shoe.  
 (014) F: No. have to go from the top of the page to the bottom. So what's this? (pointing to the word *hammer* and partially obscuring the picture of the hammer) A ...  
 (015) D: Hammer.  
 (016) F: A ... (pointing to the word *shoe*)  
 (017) D: Shoe.  
 (018) F: (on next page pointing to word) A ...  
 (019) D: Pencil.  
 (020) F: A ... (pointing to word)  
 (021) D: Sock.  
 (022) F: An ... (pointing to word)  
 (023) D: Apple.  
 (032) F: A ... (pointing to word)  
 (033) D: (two second pause) I don't know this one. It's too hard.  
 (034) F: Yes, you do. A /li ... /  
 (035) D: -----  
 (036) F: It's the things on trees. A /li ... /  
 (037) D: Leaf  
 (046) F: (points to picture of a pair of glasses)  
 (047) D: Glasses.  
 (048) F: A ... (pointing to word)  
 (049) D: -----  
 (050) F: /bl ... /  
 (051) D: Block.  
 (052) F: And a ... (pointing to word)  
 (053) D: Cap.  
 (054) F: Hat.  
 (069) F: A ...  
 (070) D: ----- (looking at book)  
 (071) F: It's what you measure things with. A ...

- (072) D: -----  
 (073) F: /ru ... /  
 (074) D: -----  
 (075) F: (beings to 'sound out' word)  
 /ru - lɪr/ (D mimics this sounding  
 out)
- (103) F: And a ...  
 (104) D: -----  
 (105) F: It's what you put on a letter.  
 (106) D: I don't know. A square.  
 (107) F: No, if you don't put it on a letter,  
 they won't send it. A
- (108) D: -----  
 (109) F: Stamp.

Turns to final page of book.

- (120) D: And the stars and the moon.  
 (121) F: (points to first word) A ...  
 (122) D: -----  
 (123) F: (points to frame around window,  
 outlining it) A window and outside  
 the stars and moon.
- (iv) [At this point D's younger sister (K — 18  
 months) picks up book and drops it on  
 floor. D goes after it but F's father comes  
 to the door at that point and the event  
 ends. (10:40 a.m.)]

An analysis of this event provides useful information about D's literacy environment and it serves both to suggest research hypotheses and to guide further observations (and interviews). We are especially interested in what messages the environment provides for D about the nature of the reading situation, the conventions of books and of reading, the information which can be found in books, and the purposes of reading and affective factors associated with reading. Also, we are very interested in how F, as one caretaker in D's environment, negotiates the zone of proximal development with him in a literacy event.

This event is a highly structured, rather formalized situation. In it F creates a two-part structure: he calls for the name of an object and provides the lead in ("A ...", "An ...") and D is supposed to provide the label for the object. When D provides the correct label, there is no verbal reinforcement; however, when D is incorrect, a tactic (discussed below) is used by F to help D get the right label. We have mentioned the concept of the zone of proximal development — a paradigm for examining the notions about the acts of reading and writing which the child receives from people in her/his environment and which s/he is thus likely to internalize him/herself. In the literacy event noted here, F helps D to complete the task of reading *Things in My House*. By doing so, F provides for D, through his questions and statements, certain "information" about what reading is and how it gets done.

Where D is unable to supply the appropriate label for the object in focus (032-037; 048-051; 069-075; 103-109 are examples included here), F provides information for D to use to obtain the message encoded in the book. On

the first occasion that D does not know the appropriate label (033), F supplies a phonic cue (034). This cue proves insufficient (035) so F offers some "world knowledge" about this thing/word and repeats the phonic cue (036). D is then able to provide the label (037). For *block* (048-051) F provides only a phonic cue. With the *stamp* episode (103-109), only "world knowledge" is offered.

In some cases, D is ultimately successful at stating the label (037); in others, he is not (108). However, in all cases, the way in which F attempts to help D negotiate the meaning of the book can serve for D as examples of strategies to be used in reading. For instance, F's "sounding out" of the initial part of a word is one strategy which D may glean from literacy events like this one. Another is the use of world knowledge. This latter factor will be especially interesting to investigate as the adults in D's environment interact with him in reading narratives. Researchers have placed a great deal of emphasis on the importance of the use of background knowledge in reading comprehension; we shall pay close attention in future events to how D's use of such knowledge is fostered (or not fostered) when reading.

In another respect, we can see how F's interactions with D in this literacy event provide information about the conventions of using books and of reading. By his statements and actions in 009, 011, and 112 and by repeatedly pointing to words in the text and moving his finger in a left to right direction under the words, F demonstrates to D (a) that in reading one proceeds in a left to right, top to bottom direction and (b) that the graphic markings on the page are used in reading. These understandings about reading are, of course, crucial for young children.

We are also concerned with affective factors associated with literacy by our target children and their families. Analysis of this literacy event provides us with some clues about affect and reading for the family. F could not be described as excited or enthusiastic during this event. In fact, his demeanor seemed rather like the formal, structured situation itself. As was mentioned, at no time does F verbally praise D for getting a label correct. It would have been interesting to note what F did in this regard at the end of the reading were the event not peremptorily closed by K and by the arrival of F's father. We plan to continue investigating the affective nature of literacy events between D and his parents in the future to determine if the "feel" of this event is typical of book readings in this family.

These aspects of the micro-analysis, then, demonstrate how we are investigating the literacy events we observe in our attempt to characterize the ways in which the children and families in our study interact with written communication. As we continue in these analyses, we feel that an overall picture of each child's literacy environment and of the child's interactions in that environment will become clear.

Another facet of these qualitative analyses is an attempt to describe the contexts which give rise to and sustain literacy events for low-income families. We shall be studying the events which precede, co-occur/alternate with, and follow all literacy events to see if there are discernible cultural patterns to the practice of literacy for our subjects. This type of analysis, combined with the micro-analyses discussed above, should give us a more complete understanding of the interactional contexts which are literacy.

### Self-Report

Audio-tape recorders have been placed with each primary caretaker and the following minimal instructions were given: "Please take about five minutes at the end of each day to record all of your child's literacy activities which took place during that day." This constitutes the first phase of "taped diary" data collection. There are two reasons for giving this minimal set of instructions to our primary caretakers. We wanted to determine both what parents would consider literate activities to be and how much information the parents would spontaneously give us about the literacy events. We have found that the diary reports vary a great deal along these two dimensions. All parents mention the occasions upon which their children write/scribble or interact with books. Several, however, mention little beyond these typical, or well-marked, literacy events. A few of our parents go beyond these typical events and cite instances when their children play with mail, read labels or signs, spell their names, listen to stories, and so forth. One parent has even mentioned such things as her daughter's sorting of cards into categories according to the symbols on them. In terms of the amount of information supplied about each literacy event there is also a range in the entries. Some provide very brief entries like these:

Karen had memorized her Sunday School verse and she was holding the paper saying the words as if she was really reading from the paper.

Karen is holding her medicine bottle reading the label her way. She is explaining how supposedly she is to take it or not to take it.

Then there is this type of report (for one day):

Wednesday. This morning, early, Kristin played with some old Medi-Cal stickers. She likes to get some papers and glue them on. Then she pretends she's a lady at the doctor's office that fixes them all on and she tells them what they're for — like this one is for Doreen got a shot or this one is for getting sick and going to the doctor — and different things like that. And I showed her which ones were for who by names on them — we even spelled them out for her so she can see; and pointed out each one started with a certain letter. And later on when the mail came, there was some junk mail from HBO saying, "Buy our service." And I let her have that to play with. She likes it because there's lots of pretty colored pictures. And she particularly asked me, though, when she sat down by me and asked me exactly what each

word said, and I had to read the whole thing to her while she pointed to each word. And then afterwards ... (continues with entry).

Overall from the taped diaries to date we find that parents tend to regard as literacy events only typical situations like book reading or writing and that they tend to give very little information about the literacy events in which their children are involved.

Once we have established for each of our parents a 'base line' idea of their unprompted notions of a literacy event, we shall begin giving the parents more detailed instructions for making their taped diaries. Our objective will be to have our parents produce tapes which provide a much more complete description of the literacy event and to have them supply information about the events which precede, co-occur and alternate with, and follow it. We will ask parents to do this within phases of the day. As they become more experienced over time they should generate descriptions which approximate the detail of our naturalistic observations.

### Controlled Behavior Sampling

Our approach to behavior sampling includes two basic techniques: interviews and the staged literacy event. As regards the first technique, the children in our study will go through a variety of interview-like situations in order to determine the extent of their print awareness and conceptions about writing. For assessing print awareness we have generated lists (for each child) of products and logos that are common in the children's environments and that may be familiar to them (e.g., Aim toothpaste, Superman logo, road signs, etc.). Drawing on these lists, we will take our youngsters through a three-phased interview on three separate occasions. First, our children will be presented with the print in a context one step removed from its normal environmental setting. The children will be shown, for example, a cut-out portion of a cereal box which has been pasted on a flat surface rather than retaining the shape of the original. Second, youngsters will be presented with representations of these graphic units without familiar accompanying color or texture of material. (For example, Coca-Cola in its usual script but without its distinctive colors.) Finally, language units presented in phases 1 and 2 will be presented in standard print. Subsequently we will conduct these interviews approximately every 3 months in order to note changes in our youngsters' awareness of print.

Another of the aims of this research is to examine the children in relation to writing. To that end, we are attempting to describe (a) the functions which writing serves for these children, and (b) the children's conception of the writing system at various points in their development. The research of Luria (1929, in Russian; 1977-78 English translation) and Ferreiro (1978) have served both to suggest the aspects of writing which might profitably be studied and to provide a methodology for doing so.

Luria was concerned with charting the development of the child's realization of certain functions and conventions of a writing system. He demonstrated that children passed through developmental stages in understanding that a graphic system can represent meanings and thereby act as a mnemonic device. The actual systems that Luria observed were ones idiosyncratic to the particular children in the study. Thus, his work can be considered an exploration of the precursors to the culturally elaborated system. Ferreiro, on the other hand, examined the child's conceptions of the nature of the culturally elaborated system. She identified six developmental categories of responses which show the children's ideas about what can be found in a written text.

Each of these researchers has focused upon factors in literacy which are important to our research concerns. At the time of this writing we are in the first phase of conducting interview-like situations with our research participants using instruments constructed to tap these factors. Following Luria's model, we are engaging the children in memory tasks that are too difficult for them to accomplish alone and noting the ways in which they use writing to accomplish these tasks. Also, as Ferreiro has done, we are presenting the children with written sentences and attempting to elicit their conception of what is written in those sentences. Subsequently we shall employ the two instruments approximately every three months in order to note change in these aspects of the subjects' interactions with written communication. This procedure will allow us to examine the areas outlined above. Of course, our on-going naturalistic observation will also be used where appropriate to supplement and/or elucidate findings from the interview situations, especially to tie in what is found about each child's developmental level in writing with the nature of the child's literacy environment (in particular the way in which the zone of proximal development is negotiated in writing activities involving caretakers and/or older siblings with the child).

In environments where literacy interactions do not normally occur, our final behavior sampling technique involves staging such events. On these occasions we ask the primary caretaker (and/or another member of the family) to, for example, read to the child. These staged events contribute to our understanding of the child's literacy environment because they provide an indication of the parents' conceptions of what is involved in such an event and how such an event is organized and carried out. For example, one of the mothers in the study has an extremely low level of literacy. She has never been observed to read herself or to read to her child. We staged a literacy event between this mother and her 3½-year-old son. The interaction was set up by asking the mother if she would mind "looking at" a book or some books with her child and having the event taped. She was compliant and seemingly at ease with the idea.

Three simple and brief books in Spanish were made available: one about a farm, one about fish, and one

about baby animals. During the interaction the mother and child faced each other much of the time, the book being oriented to the child and the mother turning it occasionally to get a better view of something. The interaction generally took the form of the mother's leafing through the book, beginning more often in the middle or at the back than at the front and not necessarily proceeding page by page or stopping on each consecutive page. The mother did stop on pages which had pictures that interested the child.

Most often the mother would ask, "What is this?" to which the child would provide an answer. The mother would then approve the response or probe for a different or more differentiated response, either by disagreeing (e.g., "Look closer; this isn't a cow") or providing the answer (e.g., "No, it's a calf"). In addition, the mother would frequently provide related comments (e.g., "The seals are climbing on top" or "There are peaches on *our* tree"). The interaction could generally be described as a question-response-evaluation format which was non-threatening to the child.

When the mother came to the book on fish, she asked the researcher if it were written in English. The researcher replied, "No ... Spanish." The mother then produced "pes-ca-do" while looking at another word.

There are several things we have noted initially from this staged literacy event. First, there are indications that interaction between mother and child around print is a rare occurrence. The awkward postural configuration arranged by the mother and the mother's unorthodox handling of the books (starting sometimes at the back of the book, sometimes at the middle) and her rather random progress through the pages suggest this to be the case. (By staging another literacy event employing wordless stories which have a conspicuous sequential plot, we plan to determine if this method of proceeding through a book is typical for her.) Moreover, this virtually illiterate mother worked around the print in the books, except for her one attempt to sound out a word.

Also, we find very important the messages about the conventions of literacy which the child is likely to obtain from this type of interaction. The mother does little to arrange for the child to learn about directionality, the fact that the print carries meaning, or book handling knowledge.

As to the affective factors associated with literacy events, it was evident that in spite of the novelty this task presented to both participants, the mother's approach was enthusiastic, and she incorporated the child's comments and responses smoothly and appropriately. He often turned pages himself and occasionally turned back to pictures they had already discussed. Similarly, on occasions when, triggered by a picture, the child referred to personal experiences (e.g., a trip to Disneyland, the peach tree outside), the mother explored these and related them to the picture and their discussion of it.

Thus, we feel that such staged literacy events between caretaker and child are useful for exploring several areas

of interest in this study. We shall continue this data gathering technique where appropriate and attempt to infer both the caretaker's theory of how literacy events with children are structured and the ideas about the conventions and techniques of and values associated with literacy which the children may be obtaining from interaction with their environments.

We are aware that our behavior sampling techniques will alter the child's normal literate environment. For example, Hood and Schieffelin (1978) present data which show that elicited imitation (and our procedure is but a variation of that linguistic procedure) represents a complex *new* task for the child which is unlike any event which naturally occurs in the child's environment. It is therefore possible that this type of intervention could provide sufficient contrast to contribute to some degree of vertical elaboration of existing notions about literacy. We shall be very sensitive to this possibility and remain alert to employ procedures in our analysis of data which will inform us about the consequences of our intervention.

### Discussion

This investigation was initiated in order to study systematically an area of considerable speculation. It is generally *believed* that the home experiences of low-income and ethnic "minority" children do not prepare them effectively for becoming literate. The home backgrounds of such children are often cited as a source of their school difficulties in reading and writing. It is assumed that insofar as reading and writing are concerned, a mismatch exists between the home and the school.

Large scale studies (e.g., Bulcock, 1977; Grant & Lind, 1975; Thorndike, 1973) are of little help on the issue of a mismatch; they serve only to demonstrate that lower class children in general and Blacks and Mexican-Americans in particular, do not, on the whole, learn to read and write as well as middle-and upper-class children. There is little systematic evidence about the everyday literacy experiences of the children that schools need most to respond to. What evidence there is is collected in ways that force the children's histories to fit the school's expectations and therefore may ignore important parts of the real histories. By investigating the literacy environments of the children in this study in the ways outlined above, we hope to be able to shed light on the children's preschool experiences and thereby provide information which schools and teachers can use to help them respond more effectively to low-income and "minority" children.

Our results are at present only suggestive of what is transpiring in these environments. We hope by the completion of the study to have developed an exhaustive taxonomy of the types and frequencies of literacy events which occur in the lives of these preschoolers. In addition, our approach to the research will facilitate a qualitative analysis of these events. Finally, we hope to de-

scribe the social organization of literacy in the homes and communities we are studying and gain insight into the relationship between this organization and the resulting kinds of literacy which particular children develop.

### References

- Bulcock, J.W. Evaluating social facts related to school achievement in Sweden and England. *Scandinavian Journal of Educational Research*, 1977, 21, 4-12.
- Ferreiro, E. What is written is a written sentence?: A Developmental answer. *Journal of Education*, 1978, 160, 25-39.
- Forester, A.D. *The acquisition of reading*. Unpublished master's thesis, University of Victoria, 1975.
- Goodman, K.S. & Goodman, Y.M. Learning to read is natural. In L.B. Resnick & P. Weaver (Eds.) *Theory and practice of early reading* (Vol.1). Hillsdale, N.J.: Erlbaum, 1979.
- Grant, W.V., & Lind, C.G. *Digest of education statistics*. Washington, D.C.: U.S. Department of Health, Education, & Welfare, 1975.
- Griffin, P. How and when does reading occur in the classroom? *Theory into Practice*, 1977, 16, 376-383.
- Hood, L., & Schieffelin, B.B. Elicited imitation in two cultural contexts. *The Quarterly Newsletter of the Institute for Comparative Human Development*, 1978, 2, 4-12.
- Luria, A.R. The development of writing in the child. *Soviet Psychology*, 1977-78, 16, 65-114. (Translated from: Problems of Marxist education, 1929, Vol. 1, 143-76.)
- Rogoff, B. Spot Observation: An introduction and examination. *The Quarterly Newsletter of the Institute for Comparative Human Development*, 1978, 2, 21-26.
- Rubin, A. The relation between comprehension processes in oral and written language. In B.C. Bruce & R.J. Spiro (Eds.). *Cognitive processes in learning to read and comprehend* (Volume III). University of Illinois, Urbana: Center for the Study of Reading, 1977.
- Shuy, R. Children's functional language development and reading. Paper presented to the Wisconsin Conference on Reading and Oral Language, 1977.
- Thorndike, R. *Reading comprehension education in fifteen countries*. International Studies in Education (Volume III). New York: Wiley, 1973.
- Whiting, J., Child, J., Lambert, W., et al. *Field guide for the study of socialization*. New York: Wiley, 1966.

Research supported by a grant award from the National Institute of Education—G 790135.