DOCUMENT RESUME

ABSTRACT
              An analysis of naturally occurring activities that
make up educational programs for young children was made in a search
for answers to the following questions: (1) How do teachers manage
learning activities in preschool classrooms? (2) What are these
learning environments like? (3) How closely do the actual occurrences
match the teachers' conceptions of what ought to occur? To find
answers to these questions, two research instruments were developed:
(1) an observational system that identifies and describes the
classroom activities; and (2) a teacher interview procedure. These
two instruments were used in a study of one preschool classroom for
disadvantaged children. The class was composed of 14 four-year-old
children who were supervised by two teachers and varying numbers of
assistants. In all, there were 14 hours of observation by two
observers, one clock hour for each child. Findings that characterized
the activities of this classroom are: most time was spent in
transition periods; much time was spent in preparing for scheduled
events; children spent over half of the time as a total group; they
were not required to interact or relate with each other; teachers
rarely permitted the children to work without direction; and most
activities were teacher initiated and organized. Two discrepancies
between the teachers' expectations and actual outcomes that most
impressed the teachers were the amount of time devoted to transition
and that no block play was observed. (DB)

1

Acting, Interacting and Responding in the Nursery School --
An Analysis of Observed Activities in
A Preschool Classroom

By Laura E. Berk and Minnie P. Berson[1]
Illinois State University

Paper Presented at the National Association for the Education
of Young Children Meeting, Minneapolis, November, 1971

PURPOSE

This research is aimed at an analysis of naturally occurring activities which

make up educational programs for young children. Answers to three major questions

are sought: (1) How do teachers manage learning activities in preschool classroc

(2) What are these learning environments like? (3) How closely does the actual

occurrence of activities in the classroom match teachers' conceptions of what ough

to occur?

It is anticipated that answers to these questions will make important

contributions to classroom organization and curriculum. Professionals in early

childhood education may be made more aware of unanticipated characteristics of

activities and their effects upon the behavior of teachers and children. By

providing feedback to teachers about what actually happens in response to

classroom practices, teachers may be encouraged to evaluate their own efforts

by considering discrepancies between expectations and actual outcomes. It is

hoped that teachers will be stimulated to consider new ways of planning and

providing activities for children.

In order to achieve these goals, two research instruments were developed:

(1) an observational system which identifies and describes activities in preschool

environments; and (2) an interview procedure utilizing this observational system first, to obtain from the teacher her conception and rationale of what ought to happen in the classroom; and second, to display the research findings to the teacher in order to explore with her consistencies and discrepancies between her conception and the observed events of classroom.

This paper reports the progress made in the development of these two instruments and their application to the study of one preschool classroom for disadvantaged children.

THEORETICAL MODEL

The analysis of preschool activities is drawn from ecological psychology and is based upon Barker's (1968) theoretical model. The behavior setting is the basic environmental unit used to describe naturally occurring nursery school activities. Behavior settings have both structural and dynamic attributes.

Structural attributes refer to the parts of a behavior setting. Two major parts are of concern here: (1) standing patterns of behavior and (2) milieu.

Standing patterns of behavior are the primary actions generally established in the setting. They have unique characteristics which persist even if the individuals participating in them change. Examples of standing patterns of behavior in the preschool setting are: children listening to a teacher read a story; girls playing house; and children riding bicycles. These behavior patterns are attached to particular groupings of nonbehavioral phenomena, or milieu.

The milieu in this case is the unique arrangement of objects and furnishings in the preschool classroom. The milieu is circumjacent to, or surrounding and enclosing, behavior. The classroom, as milieu, surrounds and encloses the standing patterns of behavior which occur there.

In addition, the milieu is <u>synomorphic</u> to behavior, or complementary to and interrelated with behavior. For instance, when preschool children are engaged in a storytelling activity, the children's chairs (milieu) and the listening children (behavior) face the teacher's chair (milieu) and the teacher reading (behavior).

Structurally, a behavior setting is a set of such <u>behavior-milieu synomorphs</u>. In the Barker and Wright (1954) view, activities, or synomorphs, within the preschool classroom are called subsettings.

<u>Dynamic attributes</u> refer to the interrelationships among the parts of behavior settings, or, relationships among subsettings. For example, storytelling, house play, and playground activities are structurally discrete but dynamically interdependent because of spacial and temporal proximity and common participants. Therefore, within the single behavior setting of a preschool classroom, changes in one activity subsetting can result in changes in others.

APPLICATION OF THE MODEL

Even the casual observer of nursery school life may be aware of the constellations or patterns formed by the objects, individuals, and behaviors making up the activities which Barker describes in theoretical terms as behavior-milieu synomorphs. On a particular day, an observer may see Johnny in several of these activity situations. First, he is seen with a group of children in the block corner, directing their own construction of high towers and sprawling fences. His second move is to join a group of children working at easels with the teacher nearby, preparing paint and hanging up finished paintings. Next, he goes off alone to work a puzzle at a table. Finally, he joins another child to hear a story being read by a teacher aide.

During the period described above, four distinct environmental contexts for Johnny's behavior are clearly noticeable. These organized activity patterns are

called activity units. In nursery school environments, activity units show
tremendous variety, but several descriptive dimensions can be applied to all of
them. These dimensions were stimulated by and are similar to those used by Gump
(1969) in his study of activities in elementary school classrooms. They include:
(1) utilization of resources; (2) child behavior; (3) group size; (4) coordination
of children's actions; (5) teacher leadership pattern; and (6) activity initiation.

Every activity unit has a resource, which refers to the basic endeavor or
purpose of the activity and the set of facilities through which this purpose is
realized. Block building, dramatic play, arts and crafts, music, and organized
group activities are examples of different resources in preschool classrooms.
Activity units can also be characterized by the basic child behavior, or standing
pattern of behavior encouraged by the activity. These child behaviors may be
passive, as when children watch or wait, or they may be active, as in manipulating,
drawing, vocal and instrumental expression, or large muscle activity. Activity
units may be further described by the group size of child participants, or whether
children engage in the activity as a total class group, as a small cluster, or a
single child; the coordination of children's actions, or action relationships
among children prescribed by the activity; the teacher leadership pattern;
and who initiates the activity, teacher or child.

METHOD

The classroom and children. The six activity dimensions described above were
applied for the purpose of summarizing the nature of activities in one preschool
classroom for disadvantaged children. The class was composed of 14 four-year-old
children (seven black; seven white; six boys, eight girls) who were supervised
by two certified teachers and a shifting number of assistants.

The classroom was partitioned into several sections: a reading corner, a house play corner, a music corner, a rug, and three larger areas with tables and chairs primarily used for sedentary activities and eating lunch. The room was located on the third floor of the school building. Children descended a flight of stairs and traversed a hallway to enter the playground, which was equipped with swings, jungle gyms, and sandboxes.

Collection and coding of observations. Naturalistic observations were collected by means of the specimen record technique which is described in detail by Barker and Wright (1954) and Wright (1967). A specimen rocord is a running description in everyday language of one child's behavior in context. It was used instead of making activity scans of the total classroom because one eventual aim of this research is to relate activity characteristics to patterns of social interaction. Specimen records can be coded for both social interaction and activity units. An example of a specimen redord with its activity units delineated and coded is shown in Appendix A.

Two observers participated in data collection. All observations took place on weekday mornings. There were three observation periods to the school day: one early morning, one midmorning, and one late morning. Six ten-minute specimen records were collected on each of the 14 children. Each child's records were distributed across the three observation periods, and each observer collected half of the observations on each child. In all, there were 14 hours of observation in the classroom, one clock hour for each child.

The observers dictated a full record of behavior in context as it happened into a tape recorder. Following transcription, observers reviewed the protocol, and missing information was filled in so that activities could be coded according to the six dimensions.

The transcribed records were coded by two trained coders. Activity unitization was determined by a change in the activity description which warranted a new code for dimensions of _utilization of resources_ and/or _child behavior_. This criterion was used to determine the beginning and end points of units because these two dimensions described the milieu and standing pattern of behavior aspects of the activity. Coding for three remaining dimensions (_group size, coordination of children's actions_, and _teacher leadership pattern_) was determined by reading through the narrative of an entire activity unit and deciding upon a code which described the way in which the majority of time was spent by teachers and children. The last dimension, _activity initiation_, was coded by examining the beginning of each activity unit. Following coding, duration of activity units was determined by timing their lengths on the observation tapes. The activity units and their respective codes are presented in Table 1. They are fully described in the results section of this paper.

Data analysis. An overall picture of the quality and variety of activities in the classroom was obtained by computing frequencies of occurrence and accumulated times and their respective percentages for each of the activity categories.

Interobserver and intercoder reliabilities. The two observers collected four specimen records simultaneously for the purpose of determining interobserver reliabilities. Two kinds were computed: (1) the extent to which activity units were observed and not overlooked in the environment; and (2) the extent to which two independent records of the same activity unit were identically coded.

An examination of the descriptive context of the records indicated that 100 percent agreement was obtained in the extent to which 12 activity units were observed independently by two observers. Table 2 shows that separate records of the same

activity units were almost always identically coded. Only the dimension of group

size showed an agreement figure (at 92 percent) that was less than perfect. The

interobserver reliability results indicate that activity units and their

characteristics are readily apparent to a trained observer.

Intercoder reliabilities were determined by having two trained coders

independently code 20 activity units. Agreement figures found were: 90 percent

and higher for utilization of resources, child activity and group size: 80 percent

for teacher leadership pattern and activity initiation; and 70 percent for

coordination of children's actions. (see Table 3)

The teacher interview. The teacher interview was aimed at obtaining from

the head teacher her conception of what ought to happen in the classroom. First,

the interviewer described the activity dimensions and their respective categories

to the teacher. Then, rank orderings of the categories for each of the dimensions

were obtained by asking the teacher to sort them on the basis of how much time

she would like to allocate to activities with those characteristics in her classroom.

Following this, the teacher was asked why she preferred activity characteristics

she ranked as high and why she did not prefer characteristics she ranked as low.

FINDINGS

Overall Description of Classroom Activities

The questions which the analysis of the observations sought to answer were:

1. What were the activity resources within the classroom? How frequently
   did children utilize them? How much and what percentage of clock time
   did they consume?

2. What kinds of passive and active child behaviors were observed in the
   classroom? How frequently did these occur? What was the amount and
   percentage of time each consumed?

Table I

ACTIVITY DIMENSION CATEGORIES

Utilization of Resources	Child Behavior	Group Size	Coordination of Children's Actions	Teacher Leadership Pattern	Activity Initiation

1. Reading
2. Block building
3. Sedentary activities
4. Dramatic play
5. Arts and crafts
6. Organized group activities
7. Music
8. Animal and plant care
9. Playground activities
10. Media experiences
11. Bodily maintenance
   a. Eating
   b. Resting
   c. Dressing
   d. Washing
12. Transition
13. Other
	1. Passive
	   a. Nonactive
	   b. Watching, listening
	   c. Waiting
	2. Active
	   a. Readying
	   b. Wandering, exploring
	   c. Eating
	   d. Manipulating
	   e. Drawing, making
	   f. Vocal and instrumental expression
	   g. Performing, acting out
	   h. Large muscle activity
	3. Other
		1. Total class group
		2. Cluster
		3. Pair
		4. Single child
		5. Not clear
			1. Coordinated / simultaneous
			2. Coordinated/ reciprocal
			3. Not coordinated
			4. Not clear
				1. Not in activity
				2. Minimal leadership
				   a. Watcher, helper
				   b. Participator
				3. Active leadership
				4. Not clear
					1. Teacher initiated
					2. Child - initiated
					3. Not clear

Table 2

AGREEMENT IN CODING OF INDEPENDENTLY RECORDED ACTIVITIES

Activity Dimension	Number of Units Identically Coded	Total Number Units Seen by Both Observers	Percentage of Agreement
1. Utilization of Resources	12	12	100%
2. Child Activity	12	12	100
3. Group Size	11	12	92
4. Coordination of Children's Actions	12	12	100
5. Teacher Leadership Pattern	12	12	100
6. Activity Initiation	12	12	100

Table 3

INTERCODER RELIABILITIES

Activity Dimension	Number of Units Identically Coded	Total Number of Units	Percentage of Agreement
1. Utilization of Resources	20	20	100%
2. Child Activity	18	20	90
3. Group Size	18	20	90
4. Coordination of Children's Actions	14	20	70
5. Teacher Leadership Pattern	16	20	80

3. What were the typical grouping patterns within the classroom? How frequently were certain groupings formed? How much and what percentage of time did children spend in various types of groupings?

4. What kinds of action coordination among children did activities encourage? How often were children's actions simultaneously or reciprocally coordinated or not clear? For how much and what percentage of time did activities involve coordination or noncoordination of children's actions?

5. What were the teacher leadership patterns within classroom activities? How frequent, how much time and what percentage of time was the observed teacher (a) not in the activity; (b) providing minimal leadership; (c) providing active leadership.

6. Who initiates activities, teacher or child, and how frequently does each initiate activities?

These questions are treated in tables 4 through 9.

Utilization of activity resources. Table 4 presents the classroom activity resources. Approximately one third of the time (30.49 percent) children were observed in transition, the time in between leaving one activity and beginning the next. Music ranked second, consuming 18 percent of the time. Sedentary activities, involving work with puzzles, lotto, color wheels, dominoes and similar materials typically used on a table top or on the floor, ranked third, consuming 12 percent of the time. Eating ranked fourth, at 10 percent; and reading (with the teacher reading, children listening, children "reading" or looking at books) ranked fifth, at 7 percent. Together, these five activities accounted for 78 percent of total class time. The remaining 22 percent of the time, listed in order of percentage of time consumed, included: resting; playground activities; arts and crafts; media experiences, organized group activities, such as circle games and Simon says; dramatic play; animal and plant care; washing and dressing. No block play was observed.

Child behavior. Table 5 depicts the child behaviors encouraged by activities. Passive behaviors include: non-active or quiescent roles, such as resting, when

Table 4

UTILIZATION OF ACTIVITY RESOURCES

Utilization of Resources	Frequency of Activity Units	%	Cumulative Time of Activity Units in Minutes and Seconds		%
1. Reading	14	6.76	61"	40'	7.34
2. Block building	0	0.00	0"	00'	0.00
3. Sedentary activities	21	10.14	101"	19'	12.06
4. Dramatic play	4	1.93	12"	49'	1.53
5. Arts and crafts	4	1.93	35"	15'	4.20
6. Organized group activities	6	2.90	17"	45'	2.11
7. Music	39	18.84	153"	46'	18.31
8. Animal and plant care	3	1.45	10"	50'	1.29
9. Playground activities	12	5.80	36"	56'	4.40
10. Media experiences	5	2.42	20"	23'	2.43
11. Bodily maintenance					
a. Eating	12	5.80	81"	23'	9.69
b. Resting	6	2.90	37"	50'	4.50
c. Dressing	1	0.48	3"	25'	0.41
d. Washing	6	2.90	7"	15'	0.86
12. Transition	73	35.27	256"	07'	30.49
13. Other	1	0.48	3"	17'	0.39
Total	207	100.00%	840"	00'	100.00%

Table 5

CHILD BEHAVIORS RELATED TO
CLASSROOM ACTIVITIES

Child Behavior	Frequency of Activity Units	%	Cumulative Time of Activity Units in Minutes and Seconds		%
1. Passive					
a. Nonactive	6	2.90	37"	50'	4.50
b. Watching, listening	25	12.08	105"	55'	12.61
c. Waiting	14	6.76	55"	03'	6.55
2. Active					
a. Readying	52	25.12	175"	32'	20.90
b. Wandering, exploring	11	5.31	22"	26'	2.67
c. Eating	11	5.31	72"	23'	8.62
d. Manipulating	22	10.63	106"	19'	12.66
e. Drawing, making	5	2.42	44"	21'	5.28
f. Vocal and instrumental expression	23	11.11	91"	30'	10.90
g. Performing, acting out	7	3.38	22"	34'	2.69
h. Large muscle activity	27	13.04	99"	23'	11.83
3. Other	4	1.93	6"	40'	.79
Total	207	100.00%	840"	00'	100.00%

activity is at a minimum; watching and listening, when the child attends, but does not do anything; and waiting, for instance, for the beginning of a new activity. Active behaviors include: readying, when the child prepares himself or materials for the beginning or ending of activities; wandering and exploring; eating; manipulating or playing with small objects; drawing and making pictures or objects; vocal and instrumental expression, involving singing, chanting and playing of instruments; performing and acting out, as in dramatic play; and large muscle activity, as in playing active games, dancing, and exercising.

Table 5 reports that readying was the child behavior consuming the most time, 21 per cent; watching, listening and manipulating each accounted for about 13 per cent of the time; large muscle activity involved 12 per cent; and vocal and instrumental expression about 11 per cent. Together these five behavior patterns consumed 69 per cent of the time. Considering the broad activity categories, children appeared active 76 per cent of the time, and passive 24 per cent.

Group size. Children functioned in the following grouping arrangements: as a total class group; in clusters of three or four; in pairs; and as singles. As shown in Table 6, the greatest amount of time was spent in total group activities, 56 per cent. Children functioned in clusters about one-third of the time, 33 per cent. Seldom were children alone (7 per cent) or in pairs (4 per cent).

Coordination of children's actions. Children's actions were categorized in three ways. Coordinated/simultaneous actions were those in which children's actions coincided, such as singing together or playing such games as Simon Says. Coordinated/reciprocal actions were of a transactional nature, such as playing complementary roles in the doll corner, or playing a game of dominoes together. Noncoordinated actions were of a solitary nature such as riding a bike, making a picture or swinging.

Table 6

GROUP SIZE DURING CLASSROOM ACTIVITIES

Group Size	Frequency of Activity Units	%	Cumulative Time of Activity Units in Minutes and Seconds		%
1. Total class group	117	56.52	466"	32'	55.54
2. Cluster	50	24.15	279"	18'	33.25
3. Pair	17	8.21	30"	11'	3.59
4. Single child	20	9.66	55"	12'	6.57
5. Not clear	3	1.45	8"	27'	1.05
Total	207	100.00%	840"		100.00%

Table 7

COORDINATION OF CHILDRENS' ACTIONS
IN CLASSROOM ACTIVITIES

Coordination of Childrens Actions	Frequency of Activity Units	%	Cumulative Time of Activity Units in Minutes and Seconds		%
1. Coordinated/simultaneous	58	28.02	232"	11'	27.64
2. Coordinated/reciprocal	17	8.21	72"	09'	8.59
3. Not coordinated	127	61.35	516"	22'	61.47
4. Not clear	5	2.42	19"	18'	2.30
Total	207	100.00%	840"		100.00%

As summarized in Table 7, children func ...ned in a noncoordinated way most of the time, or 61 per cent. Actions were simultaneously coordinated about 28 per cent of the time and reciprocally coordinated about 9 per cent.

Teacher leadership pattern. A description of the ongoing patterns of the teacher's relationships to the children ranges from nonparticipation of the teacher in an activity to being an active director and the key to activity setting action. In between, the teacher exerted minimal leadership as a watcher-helper or as a participator along with the children.

As displayed in Table 8, teachers in this classroom played an active leadership role 50 per cent of the time. About 36 per cent of the time, the role was one of minimal leadership, mostly as a watcher or helper and rarely a participator. Seldom, or 13 per cent of the time, did the teacher remain outside of the activity.

Activity initiation. As shown in Table 9, the majority of the activity units, 74 per cent, were initiated by teachers. Children initiated only 18 per cent of the units. The remainder of the units could not be clearly coded as either teacher or child initiated.

Activity dimension patterns. The classroom description to this point has considered activity units in terms of single dimensions. In Table 10, the dimensions are examined simultaneously in order to determine the typical patterns of activity unit qualities which occurred.

Out of a total of 207 activity units observed, 108 activity patterns occurred. The variety of activity patterns actually occurring in the classroom, as compared with the number which could conceivably occur, is much reduced because activity units with identical codings are sometimes repeated. For example, reading almost invariably involves a child behavior of watching, listening. Music is closely associated with vocal and instrumental expression, although it can be related to

Table 8

TEACHER LEADERSHIP PATTERNS OF CLASSROOM ACTIVITIES

Teacher Leadership Pattern	Frequency of Activity Units	%	Cumulative Time of Activity Units in Minutes and Seconds		%
1. Not in activity	26	12.56	61"	51'	7.36
2. Minimal leadership					
a. Watcher, helper	53	25.60	258"	27'	30.77
b. Participator	10	4.83	47"	47'	5.69
3. Active leadership	107	51.69	423"	35'	50.43
4. Not clear	11	5.31	48"	20'	5.75
Total	207	100.00%	840"	0'	100.00%

Table 9

INITIATION OF CLASSROOM ACTIVITIES

Activity Initiation	Frequency of Activity Units	%	Cumulative Time of Activity Units in Minutes and Seconds		%
1. Teacher – initiated	154	74.40	680"	42'	80.70
2. Child – initiated	38	18.36	107"	46'	12.78
3. Not clear	15	7.25	51"	32'	6.11
Total	207	100.00%	840"	00'	100%

Table 10

ACTIVITY UNIT PATTERNS ACCOUNTING FOR FREQUENCIES AND CUMULATIVE

TIMES OF MORE THAN TWO PERCENT

Utilization of Resources	Child Behavior	Simultaneous Activity Unit Codes				Freq. of Activity Units	% of Activity Units	Cumulative of Activity Unit Time in Minutes	%
		Group Size	Coordination of Children's Actions	Teacher Leadership Pattern	Activity Initiation				
Transition	Readying	Total class group	Not coordinated	Active leadership	Teacher initiated	28	19.53	107	12.75
Music	Vocal and instrumental expression	Total class group	Coordinated/ simultaneous	Active leadership	Teacher initiated	18	8.70	73	8.70
Eating	Eating	Cluster	Not coordinated	Watcher helper	Teacher initiated	10	4.83	71	8.40
Music	Large muscle activity	Total class group	Coordinated/ simultaneous	Active leadership	Teacher initiated	10	4.83	42	5.05
Media experiences	Watching, listening	Total class group	Not coordinated	Active leadership	Teacher initiated	5	2.42	21	2.43
					TOTAL	71	34.31	314	37.33

other action patterns, such as _performing, acting out_ or _large muscle activity_.

Findings shown in Table 10 indicate that a readying transition of the
total class, initiated and directed by the teacher, accounted for about 13 per cent
of the time the children spent in the classroom, and that it was the activity
pattern of greatest occurrence. The music circle, where children sang songs led by
the teacher was second and accounted for about 9 per cent of the time. Eating
lunch, with children assigned to tables in clusters and teachers assisting them,
was third greatest in occurrence, consuming 8 per cent of the time. Fourth in
occurrence, and utilizing about 5 per cent of the time was a music activity led by
the teacher which involved movements such as exercising, marching and moving.
Media experiences, involving looking at movies and photographs, was fifth in
prominence and accounted for over two per cent of the activity time.

These five activity patterns together add up to only 34 per cent of the total
number of activity units and 37 per cent of the time spent in the classroom. The
fact that 63 per cent of the time is unaccounted for in Table 10 may lead to the
conclusion that many patterns in this classroom were not identically repeated from
time to time and that great activity variety was offered to children.

An additional activity pattern analysis (see Table 11), eliminating dimensions
of resources and child behavior, shows that a substantially greater percentage
(72 per cent) of the observation time is accounted for by relatively few
combinations of the remaining four dimensions. Frequently occurring activity
patterns primarily involved a total class group or cluster arrangement, were either
simultaneously coordinated or not coordinated, were either minimally or actively
led by the teacher, and were teacher initiated. Activity resource and child
behavior were the dimensions responsible for activity variation in this classroom.

Table 11

ACTIVITY PATTERNS ACCOUNTING FOR CUMULATIVE TIMES OF
MORE THAN TWO PERCENT

| Group Size | Simultaneous Activity Unit Codes | | | Freq. | % | Cumulative Time in Minutes | % |
	Coordination of Children's Actions	Teacher Leadership Pattern	Activity Initiation				
Total Class Group	Not Coordinated	Active Leadership	Teacher Initiated	41	19.81	156	18.52
Total Class Group	Coordinated/Simultaneous	Active Leadership	Teacher Initiated	38	18.36	148	17.73
Cluster	Not Coordinated	Watcher, Helper	Teacher Initiated	17	8.21	112	13.35
Cluster	Not Coordinated	Active Leadership	Teacher Initiated	8	3.87	42	4.98
Total Class1 Group	Not Coordinated	Watcher, Helper	Teacher Initiated	6	2.90	30	3.60
Cluster	Coordinated/Simultaneous	Active Leadership	Teacher Initiated	4	1.93	26	3.05
Total Class Group	Not Coordinated	Not Clear	Teacher Initiated	7	3.38	24	2.81
Total Class Group	Not Coordinated	Watcher, Helper	Not Clear	4	1.93	23	2.74
Total Class Group	Coordinated/Reciprocal	Watcher, Helper	Teacher Initiated	3	1.45	22	2.62
Cluster	Not Coordinated	Watcher, Helper	Child Initiated	4	1.93	22	2.62
				132	63.77	605	72.02

19

Additional activity characteristics remained relatively consistent from one activity to another.

Summary. Several findings which stand out serve to characterize the activities of this classroom.

First, the largest proportion of children's time was spent in transition periods. There was a high occurrence of readying, a behavior pattern closely associated with transitions. Block building, dramatic play, arts and crafts, and other activities typically thought of as stimulating creative individual expression were absent or rarely in evidence.

Second, while children were active about three fourths of the time, an inordinate amount of the active time was spent in assembling and preparing for scheduled and planned events. Aside from readying, there was a strong emphasis on activities requiring children to watch, listen, manipulate small objects, sing and play instruments, and move about the room together.

Third, children spent over half the time together as a total group and about a third of the time in clusters. Seldom were they involved in self-initiated, independent activities.

Fourth, although the children spent most of their time as a total group, they were not required in this grouping pattern to interact or relate with each other. When their activities were coordinated, it was for the purpose of responding identically in unison.

Fifth, teachers in this classroom were either active or minimal leaders the great majority of time. Rarely did they permit children to work without teacher direction.

Finally, most activities were teacher-initiated, teacher organized, and teacher directed.

The Teacher Interview

In general, the interview findings indicate that some of the teacher's goals

and expectatikns related to classroom activities were realized, and others were not.

The teacher's rationale and justification for her preferences with respect to

several activity dimensions appeared undeveloped and incomplete. This may be due

to the fact that the activities, as they were presented to her in the interview,

were in an unfamiliar frame of reference.

Utilization of resources and child behavior. These were the two dimensions

showing the greatest discrepancy between the teacher's stated preferences for what

ought to occur and what was actually observed (see Table 12). Rank order correlations

between observations and teacher preferences were of zero order (.04 for resources

and -.03 for child behavior.)

Organized group activities and sedentary activities were ranked first and

second, respectively, in relation to the amount of time the teacher felt should be

allocated to activities. In correspondence with teacher preferences, sedentary

activities did consume a large proportion of time in the classroom, ranking third,

according to observation. In contrast, organized group activities ranked tenth

in observed occurrence.

Manipulating and vocal and instrumental expression were the child behaviors

ranked first and second by the teacher. According to observation, manipulating

ranked second and vocal and instrumental expression ranked fifth.

According to the teacher, the above activity characteristics were preferred

because of the children's background. "In these activities," stated the teacher,

"children learn basic skills. They prepare the children for other activities."

Thansition was ranked lowest by the teacher but, appeared highest in observed

occurrence. Washing was ranked fourteenth fy the teacher, which closely corresponded

Table 12

TEACHER RANKINGS AND OBSERVED RANKINGS OF CATEGORIES FOR ACTIVITY DIMENSIONS:
UTILIZATION OF RESOURCES AND CHILD BEHAVIOR

Utilization of Resources	Teacher Rank	Observed Rank	Child Behaviors	Teacher Rank	Observed Rank
Reading	4	5	Nonactive	9	9
Block building	3	15	Watching, listening	7	9
Sedentary activities	2	3	Waiting	11	7
Dramatic play	7	11	Readying	10	1
Arts and crafts	5	8	Wandering exploring	5	11
Organized group activities	1	10	Eating	8	6
Music	6	2	Manipulating	1	2
Animal and plant care	11	12	Drawing making	3	8
Playground activities	8	7	Vocal and instrumental expression	2	5
Media experiences	9	9	Performing, acting out	4	10
Eating	10	4	Large muscle activity	6	4
Resting	12	6			
Dressing	13	14			
Washing	14	13			
Transition	15	1			

Rho=.04   Rho=-.03

with its observed occurrence of thirteenth. The teacher stated, "If a child were replacing materials as he had used them, it wouldn't be necessary to spend too much time in transition. Washing is necessary, but should not take too much time."

Readying and waiting were the two child behaviors ranked lowest by the teacher because "these would be most frustrating for the children." Observed rankings again disagreed with teacher preferences. Readying ranked first in observed occurrence, and waiting ranked seventh.

Group size. Discrepancies between teacher preferences and observations were also found for child grouping arrangements. The teacher ranked clusters first and total class group second because "more could be accomplished in small groups." In actuality, total class grouping arrangements were first in occurrence with clusters following second. The single child arrangement was least preferred by the teacher. When asked why, she stated that she was unsure. Both paired and single child arrangements actually occurred infrequently in this classroom.

Coordination of children's actions. In agreement with classroom observations, the teacher preferred activities requiring noncoordination of children's actions to those requiring action coordination. She stated that action coordination, while it might encourage interaction among children, deprived them of needed individual attention from adults.

Teacher leadership pattern. Consistent with classroom observations, the teacher ranked active teacher leadership in activities first, minimal teacher leadership second, and teacher not in activity. third. Again, the reasons stemmed from her views of the children's experiential background. She stated, "They need models. Initially these children need firm limits in order to get to the point where they don't need the teacher."

Activity initiation. The teacher's preference for teacher initiated activities, rather than child initiated ones, was consistent with the observations. Her stated reasons for preferring teacher initiated activities were: "Because of the deficits which the children have and because they were so limited, certain basic skills were needed first."

Feedback of findings to the teacher. Two discrepancies between expectations and actual outcomes most impressed the teacher when the findings were presented to her.

The first was the disproportionate amount of time devoted to transition and readying in the classroom. Though the teacher stated that some beneficial experiences occurred during transitions (e.g., learning to set the table for lunch), she thought that an attempt should be made to reduce the amount of time devoted to preparing and assembling for activities.

Second, the teacher was surprised that no block play was observed, because there were blocks available in the classroom. She thought that opportunities had been available for the children to use the blocks and was disappointed that these materials had not been utilized. Block play was ranked third in importance as an activity by the teacher.

IMPLICATIONS

In this pilot study, a system for observing and analyzing preschool activities was applied in one nursery school classroom. Observations of classroom activities were compared with teacher stated preferences for activity characteristics. The findings of the observations were shared with the teacher, and her reactions to them were noted.

This research provides an opportunity for the teacher to become more aware of what happens in her classroom. It may also make the teacher conscious of activity

characteristics she had not previously considered, and it may encourage her to re-examine what she does with children, and why she does it. Follow-up research is desirable in order to find out what changes in classroom practice occur in response to feedback of these findings to the teacher.

References

Barker, R. G., Ecological Psychology. Stanford, California: Stanford
      University Press, 1968.

Barker, R. G., and Wright, H. F., Midwest and Its Children. Evanston,
      Illinois: Row, Peterson & Co., 1954.

Gump, P. V., "Intra-Setting Analysis: The Third Grade Classroom as a Special
      but Instructive Case." In Willems, E. P., and Raush, H. L.,
      Naturalistic Viewpoints in Psychological Research. New York: Holt,
      Rinehart and Winston, 1969.

Wright, H. F. Recording and Analyzing Child Behavior, New York: Harper
      & Row, 1967.

APPENDIX A

Sample Coded Observation

School: CSP
Date: 5/7/1971
Time: 10:05 AM
Child: George
Observer: LEB

- - - - - - - - - - - - - -

Duration = 2"55'

Activity Dimension Codes!

1) Sedentary Activity
2) Manipulating
3) Cluster
4) Not coordinated
5) Active Teacher
   Leadership
6) Teacher Initiated

George is sitting at a small table with Lois and Ernestine and Mrs. A.
He is playing a card matching game with Mrs. A. and the two girls and is also holding a toy camera in his hands. The game was initiated and organized by Mrs. A.
The teacher says to George, "I have a card which is not red, which is not yellow? What color do you think it is?"
George points the camera at Mrs. A, but he doesn't answer.
She says, trying to encourage him to respond, "I'm going to let you take a peek."
Then she turns the card over and flashes it in front of George for a brief moment. The other two children watch.
Then Mrs. A. asks again, "What color is it?"
George doesn't answer.
Mrs. A. then says to the three children, "Who thinks they need this card?"
Now George responds by raising his hand and waiving it enthusiastically.
Mrs. A gives the card to George.
He takes it and matches it to his larger card.
Mrs. A. says excitedly to George, "You've got the feet!" indicating that George has matched the picture to the feet of the animal on his card.
George says, "It matches."
The teacher confirms, "Yes, it matches."
Mrs. A. continues, saying to George, "Now you need a new card. Here comes your secret card."
George says excitedly when he sees it, "A donkey! I got a donkey! I got a donkey!" The card the teacher is holding up is a picture of a donkey.
George takes the card from the teacher and says again, almost bragging to the other children, "I got a donkey, I got a donkey, I got a donkey!"
The aide says, "Yes" to George after he has repeated himself many times, and he finally stops.
In the meantime, Lois and Ernestine have been watching quietly.
George looks at some other matched pictures he has and fingers them.

Duration = o'25"

Activity Demension Codes!

1) Transition
2) Wandering, exploring
3) Pair
4) Not coordinated
5) Teacher not in
   Activity
6) Child initiated

Duration = 0"50'

Activity Dimension Codes!

1) Sedentary activity
2) Manipulating
3))Cluster
4) Not coordinated
5) Teacher watcher,
   helper
6) Teacher initiated

Duration = 1"35'

Activity Dimension Codes!

1) Transition
2) Readying
3) Total class group
4) Not coordinated
5) Active teacher
   Leadership
6) Teacher initiated

Then he begins to stack his pictures as the teacher
talks to Ernestine. Then he fingers the toy camera.
He looks around.
He puts the camera down on top of the cards.
He gets up from the table.
He goes to another table where there is another group
of children with Mrs. K.
He says to one of the children, "Hi, Willie."
George takes Willie's arm.
Willie follows after him, which is apparently what
George wants him to do.
George wanders around the room with Willie following,
apparently looking for something to do.
They go over to a third group working on matching
pictures with another teacher, Mrs. D. George stands
and watches.
She invites them to join the game and says to George,
"George, maybe you can fix this for us," meaning
maybe George can match a picture which the other
children have been having difficulty with.
George sits down at the table and begins to work on
matching the pictures.
He is having difficulty, and the Mrs. D. hints to him,
"Try this one."
George tries it in the wrong place, then puts the card
down.
Mrs. D. indicates, "Over here."
George picks up the wrong card and tries it over there.
Mrs. D. says, "That doesn't fit" and takes the card
away.
She says, "try this one," and gives him the original
card.
George matches it correctly.
Mrs. A. comes over to the table and says to the group of
children there, "Its story time." The other two small
groups have broken up. Mrs. A. indicates that the
children should go over to the rug to get ready for
the story.
George jumps up from the table and runs in the opposite
direction from the rug.
Mrs. A. says, somewhat impatiently, "George, its
storytime."
At this, George comes over and sits down on the rug.
While the three teachers are readying the remaining
children, George sees Dana and Willie fighting.
He says loudly, "No fighting in the school."
Mrs. A. calls out in response, "That's right, George,
no fighting in the school."
Then the teacher stops Willie and Dana from fighting
as George watches.

George gets up from the rug and runs from one end of the room to the other.

He stops abruptly and says sharply to Willie, "Don't step on it," and he holds Willie back from stepping on a pile of matching cards on the floor.

When he lets Willie go, Willie steps over the cards. In the meantime, the three teachers are involved in trying to get all the children over to the rug for a story. Many of the children are running around the room.

One teacher goes in the direction of George.

George seems to anticipate her actions and goes to meet her, taking her hand and leading her across the room.

He is pulling her arm, and walking very quickly.

Mrs. D. says, "No, not so fast. It hurts when you go so fast."

George slows down, and together they walk slowly up to a table, Mrs. D. following George.

Then Mrs. D. lets go of his hands and turns away as she sees some other children to attend to.

After Mrs. D. lets go, George begins to wander around the room again.

He goes over to the piano and begins to finger it.

Duration = 3"05'

Activity Dimension Codes!

1) Music
2) Instrumental expression
3) Cluster
4) Not coordinated
5) Active Teacher
   Leadership
6) Child initiated

Mrs. D. comes back over to him, sits down on the piano bench, lifts George on her lap, and says, "You'd like to play the piano properly, not finger like this."

She holds George's fingers and moves them across the piano so that he plays a song.

He lets her do this and watches his hands, interested in the playing.

In the meantime, some other children cluster around the piano, watching.

The teacher says, "Shall I play your favorite song?" George says, "Yes."

She begins to move his fingers to play his favorite song, "Twinkle, Twinkle, Little Star."

Then George begins to move one of his hands by himself as Mrs. D. plays the accompaniment.

He is smiling happily.

She takes his finger again and moves it so that he plays, "Twinkle, Twinkle, Little Star."

The teacher continues moving his fingers over the piano.

At the end of the song, she says, "Thank you, George."

George demands, "More."

Mrs. D. says, "No, its somebody else's turn now."

He gets up from her lap compliantly and looks at the record player which is next to the piano.

Duration = 1"50'
Activity Dimension Codes!

1) Transition
2) Readying
3) Total class group
4) Not coordinated
5) Active teacher
   leadership
6) Child initiated

He says something to the teacher about the record
player, apparently stating that it plays songs, too,
although exactly what he said could not be heard.
Then Mrs. D. says, "Let's sit on the rug, George,"
returning to trying to get George as well as the other
children ready for a story. Most of the other children
are now gathering about the rug. The two other teachers
are seating them.
George doesn't pay any attention to Mrs. D.
He goes back over to the piano and begins to finger
it.
Mrs. D. says to George, "I need you on the rug."
He runs away in the other direction.
Paul now leaves the rug and chases George, trying to
grab him.
George runs away and climbs under a table in the far
corner of the room.
Paul gets under the table with George.
Mrs. D. says, "Okay, no playtime for Paul and George,"
meaning that they will not be able to go outside later.
When they do not respond, Mrs. D. says impatiently,
"Anyone who doesn't want to go to the rug may go behind
the curtain and sit down by themselves."
George still stays under the table.
In the meantime, some of the other children at the rug
begin to stray, and the two remaining teachers try to
bring them back.
George comes out from under the table, goes over to
a shelf, and picks up a puzzle.
He ignores Mrs. D.'s command to go over to the table.