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ABSTRACT

The general method of observation of education for preschool children, and the conceptual dimensions underlying the categories of experience are discussed. The technique used for measuring preschool experience is the Inventory of Children's Preschool Experience (ICPE). The scale provides a description of the experiences of specific children in the classroom. Time sampling is used: The unit is 30 seconds long and there is a 90 second time-out period for recording. The scale is divided into two parts. Categories concerning what the child is doing are recorded in the upper part and the activities of the teacher or other adult which are directed to the referenced child are recorded in the lower part. In the development of the categories several theoretical approaches provided an organizing framework, e.g., social learning, many of Piaget's notions and operant conditioning. The categories are divided into six broad classes: two for the child and four for the teacher. For the child these categories are those involving interaction with materials and those involving social interaction and affect. For the teacher these are: transmitting skills and knowledge; activities concerned with encouraging, modulating, and inhibiting child's behavior; providing feedback and contingent reward or reinforcement; and providing praise and experiences which would tend to enhance the child's feelings of self worth. It is concluded that there is no single approach that can be used to derive a set of variables from a larger set of categories. (Author/CK)

An Approach to the Measurement of Preschool Environments*

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With the advent of compensatory education for preschool children the question concerning just what effects, if any, occur as the result of attending a preschool has become particularly crucial. During the past several years many researchers have come to the conclusion that in order to answer this question it is necessary to obtain a record of the types and frequencies of experiences that children in various preschool programs have. Perhaps one sort of program is beneficial, but others may have no effect or actually be harmful. The best way to answer this question would be to study the relationships between children's experiences in preschool programs and their growth in both the cognitive and personal-social areas. Then we could talk about the effects of specific experiences rather than merely being in some sort of preschool program versus not being in one. In order to study these relationships for children who are in Headstart several members of the staff of the Social and Behavioral Sciences Branch developed an observational technique for measuring preschool environments, the Inventory of Children's Preschool Experience. The main persons involved in development of the scale were Drs. Yarrow, Pedersen, Fox and Lomonaco and Mrs. Sklar. The ICPE has now been used in both compensatory

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preschool programs and programs for middle class children. In this paper I shall describe the general method of observation and the conceptual dimensions underlying the categories. Then I shall discuss two issues which use of the scale has raised for us: 1) determining the extent to which our conceptual dimensions are supported by our observations and 2) the meaning of within classroom variation of scores from our scale.

Method of Observation

The focus of observation is always a particular child rather than the teacher or the classroom as a whole. Thus the scale provides a description of the experiences of specific children in the classroom. Our rationale for this is that many activities are self-selected and teachers may spend different amounts of time with different children. If one wanted to obtain a picture of the characteristics of the classrooms as a whole and of the teacher presumably it could be obtained by observing several children in that classroom. This is in contrast to observation methods such as the OSCI in which the observer scans the entire classroom each observation unit. At this point it is still unclear whether or not the overall picture of a classroom obtained by the individual child method is comparable to the picture obtained by the classroom scanning method.

The first handout shows an observation sheet. Time sampling rather than event sampling is used. The time unit is 30 seconds long and there is a 90 second time out period for recording. The scale is divided into two parts. Categories concerning what the child is

doing are recorded in the upper part and the activities of the teacher or other adult which are directed to the reference child, either alone or as part of a group, are recorded in the lower part. After each 30 second observation period one row in the top half and the corresponding row in the bottom half of the form is filled out. There is space for ten such units on a form. This provides for five minutes of actual observation spread out over a period of 20 minutes. In our study of Headstart classrooms each child was observed for 60 units in the Fall, Winter and Spring. These observations were divided among three days in each season. Thus each child was observed for nine days during the year for 20 units on each of the days.

The training required to use this scale is considerable. On the average some ten weeks of practice was required to become proficient in its use. In addition, considerable experience with young children and knowledge of various approaches concerning preschool programs proved to be very helpful.

The reliability coefficients of those categories which occurred with reasonable frequency range between .60 and .80. Unfortunately there were several categories which occurred very rarely. These had to be either eliminated from the analyses or combined with other categories. As there are several methods of calculating observer reliability, a brief description of how we calculated them is perhaps appropriate. A separate sample of 25 children served as the reliability subjects. Each child was observed for 20 units. All three observers in the main

study observed each child simultaneously. Totals for each category, for each child and each observer were calculated. Finally, correlation coefficients were n between the corresponding totals for each pair of observers. The resulting reliability coefficient is the average correlation across all three observer pairs.

Organization of the Scale

In the development of the categories several theoretical approaches provided an organizing framework, e.g., social learning, many of Piaget's notions and operant conditioning. Equally important, of course, was actual observations of preschool children themselves. Ideas from the various theoretical approaches were translated into category definitions. Then a team of observers tried to apply these categories to the activities in several preschool classrooms. They were especially concerned with the difficulty of making the distinctions required by the definitions and with the extent to which the definitions reflected differences among the activities which seemed to be important. On the basis of these experiences the categories were revised.. This cycle of conceptual framework to actual observation and back to conceptual framework was repeated many times before we arrived at the final definitions.

An outline of the organization of the scale is presented in the second handout. There you can see we divided the categories into six broad classes, two on the child's side and four on the teacher's.

On the child's side we divided the categories into those involving interaction with materials and those involving social interaction and affect. We viewed teacher behavior as being made up of four sets of activities. These are 1) transmitting skills and knowledge; 2) activities concerned with encouraging, modulating and inhibiting child's behavior; 3) providing feedback and contingent reward or reinforcement and; 4) providing praise and experiences which would tend to enhance the child's feelings of self worth. I shall now discuss each of these six broad classes of categories in turn.

Looking at IA on the handout, "Interactions with materials," we have tried to describe both the content and some of the characteristics of these interactions. Any particular activity could fit into more than one content area. For example, doing puzzles would be an instance of both visual discrimination and fine motor activity. The contents we were most interested in were those involving perceptual discrimination and those focused on the acquisition of verbal and conceptual skills. The latter included labeling, quantitative activities, categorization and information about the world. This last category would include listening to or emitting such statements as "Fire engines have loud sirens" and "Plants and animals are both alive" but would exclude "We have to wear coats because it's cold in winter" and "Last week I went to the zoo and saw a white tiger."

Although the "what" of children's activities is very important, we feel that for a complete picture of a child's experiences one also

needs to know something about the "how," i.e., the manner in which children interact with materials. One of the characteristics of the child's activities that we tried to describe was his level of attention. This could range from "minimal"--i.e., fleeting attention to a task or attention to many different tasks, to "focused"--i.e., child primarily attends to his task but may have one or two brief social interactions or g nces elsewhere. Presumably the amount of cognitive gains should be related to level of attention to tasks. A second characteristic was whether the child's activity was of a passive or an active nature. The former included any observing with the apparent intent to learn about the properties or functions of objects or materials. This would include looking at another child at work with material but would exclude watching children play a game. Active participation would have to involve some manipulation of material or objects. One might hypothesize that making an overt response would be more facilitative of learning than merely observing. Thirdly we tried to get at whether the activity had some sort of intrinsic feedback and thus allowed for one or very few response options or whether the activity allowed for many response options. Puzzles is an example of a highly structured activity; working with play doh would be an unstructured activity.

We grouped the categories dealing with Social Interaction and Affect (IB on the handout) under five headings. Level of social participation consists of four categories going from "solitary" to "cooperative play." Also indicated under level of social participation

is whether the participation came about as a result of child initiative or was initiated by the teacher. The final category under this heading is "common activity"--"teacher or aid structures an activity in which social interaction between children is subordinated to the group task and is unnecessary for its completion." This includes group singing, and listening to a story but excludes eating and clean-up. The other headings are fairly self explanatory and so I shall move on to the teacher categories (II in the handout).

To describe the teacher's behavior in transmitting skills and knowledge we had three groups of categories. The first group describes content and corresponded to content categories in the child's side. Not surprisingly we found substantial correlations between corresponding categories of teacher and child activities. The technique used in presenting the curriculum was also recorded. Here we were primarily interested in whether the teacher tended to present her curriculum primarily by emitting the relevant responses or whether she focused on eliciting responses from the child. We hypothesized that eliciting would be a more effective technique than emitting. Aside from the technique involved in transmitting a particular item of cognitive content, the teacher's approach to teaching can be described in broader terms. Does she attempt to provide skills and knowledge by having children select their own activities or does she set up a particular activity which the children must do? Various approaches to preschool education differ with respect to which of these alternatives they

emphasize. For example, both the Bank Street and Montessori programs focus on having children select their own activities. On the other hand, the Bereiter-Engleman approaches emphasizes formal instruction with the teacher determining the activity. We tried to get at this by coding whether a particular unit occurred during free choice or under highly restricted conditions.

The teacher's control requests (IIB) were described in terms of six dimensions: 1) prosocial controls. This included three categories: initiates, sustains and terminates. What these categories have in common is that they involve activities acceptable to the teacher. Thus they contrast with 2) antisocial controls--which include attempts to modify or stop unacceptable activities. The third dimension of interest to us was whether the teacher tried to develop self control in the children. This included (a) attempts to induce control over the intensity or the pace of the child's behavior, e.g., "Let's speak with our indoor voices"; (b) requiring the child to wait before engaging in a new activity or attaining some desired goal and (c) giving information about future activities (structuring expectancies). Although we feel that these are a very important facet of control activities, they occurred so rarely we could not make use of scores on them in our analyses. The fourth aspect of influencing the child's behavior we tried to tap was conditional reward. This is defined as stating an extrinsic reward as a consequence of compliance, e.g., "If you clean up quickly I'll give you all a piece of candy." A fifth category was

conditional goal attainment which included statements in which the behavior requested was shown to be inherent in the sequence of instrumental acts necessary to attain a goal. An example would be, "We have to mix the batter for a long time so that it will be nice and smooth." The final dimension of control requests we called rationale--giving a reason for command or request. This could include consequences of behavior but excludes appeals to authority or social conventions. For example, "Don't throw the blocks on the floor because it disturbs the rest of us."

In addition to her activities involved in presenting the curriculum and in making control requests we had categories for two other areas of the teacher's behavior. One was providing feedback and reinforcement. The codes described the particular behavior being reinforced and whether the reinforcement was positive or negative. The other area of behavior included praise and remarks directed toward enhancement of feelings of self worth. Two categories were seen as tapping the concept of enhancing self worth. One is person differentiating which included teachers comments or attempts to direct responses about personal attributes of the child which we hypothesized might be related to a sense of personal identity and differentiated self-concept. For example, asking "Where do you live?" and saying "Jerome, you can't sing very well but you paint wonderfully." The other category we called identification and labeling of feelings; e.g., "You look sad." Another dimension, which we called nurturance, is simply the combination of the categories under "Praise and enhancement of self worth" with positive feedback and reinforcement.

Discussion

All told there are some 120 categories in our observation scale. Our main approach to reducing these to a manageable number of variables has been to combine categories on the basis of theoretical and conceptual considerations. But what kind of empirical support do the data provide for such variables? Of course the usual statistical approach for such questions is factor analysis. Before discussing the results of the factor analyses we ran on our data which are presented in Handout 4, I would like to discuss some of the difficulties I faced in trying to apply factor analysis to our scale.

It seems to me that the difficulties stem from the fact that data from observation scales such as ours is quite different from data from a battery of tests, which is the sort of data factor analysis has most often been applied to. The first difficulty is that some categories are interrelated by definition. There are some categories whose occurrence implies the occurrence of certain other categories. There are also categories for which the coding is mutually exclusive, e.g., the codes for structured and unstructured activity cannot both occur in the same time unit. Presumably this difficulty can be handled by merely eliminating the appropriate categories from the factor analysis.

A second difficulty is illustrated by the fact that correlations between the categories of column four, child cognitive activities and the corresponding categories of column 13, teacher cognitive activities

are fairly strong, which is to be expected. Nevertheless it seems reasonable to consider child participation in cognitive activities separately from the extent to which teachers explicitly provide cognitive stimulation. This can be taken care of by factor analyzing the matrix of child variables separately from the matrix of teacher variables. Unfortunately we are not out of the woods yet. We need to take into account relationships found between categories in one column and those in another. In some cases these relationships are a matter of definition but in a somewhat different sense than I discussed just a moment ago. Consider the relationships between control activities and control techniques on the one hand and the similar relationship between cognitive activities and cognitive techniques. If a category is coded for the activity member of a pair something must be coded for the technique member. One may well find for particular programs that a particular control activity is more highly related to a particular control technique than it is to the use of any other control activity. Yet the wisdom of combining the two into a single variable is questionable.

So from trying to see what variables emerge from the scale as a whole we are left, by the process of elimination, with the approach of extracting factors from the categories of only one column at a time. This we have done. Even so the meaning of the resulting factors is still ambiguous. This is so because unlike scores from a battery of

tests, observation data are all obtained from a single series of events. The same observation unit which is used to code one category is also used to code all the others. Of course this fact is also largely responsible for the difficulties I have just discussed. But in addition a correlation between two categories can be due to the fact that the two categories tend to co-occur in the same time unit due to a particular event being coded for these two categories. This would be the case, for example, with puzzles which would be coded for visual discrimination and fine motor. Another possible interpretation of a high correlation coefficient is that classrooms high in one sort of activity are also high in another sort of activity. For example, a teacher may do a great deal of work on labels on one day and then focus on categorization the next. The question is does a category which occurs alone have the same meaning as when it occurs in concert with certain other categories.

Moreover for those categories which although conceptually related are not in fact intercorrelated there is still the question of to what extent they are substitutable for one another. Some teachers may focus on transmitting information and others may emphasize practice in categorization but the effect of these two sorts of cognitive activities on the child's verbal skills may be similar.

Given these provisos, the data in handout #3 seem to provide some support for our dimensions in the cognitive area but not much support in the areas of controls and feedback and reinforcement. Indeed, we

find it very difficult to interpret several of the factors in these latter two areas. Factor 1 under control activities seems to suggest that the breakdown into prosocial controls and antisocial controls has little empirical foundation since one category from each of the dimensions loads on this factor. This is also true for factor 2 under that heading. No factor involving our verbally mediated control request categories appears from the analysis of control techniques. On the other hand our praise and self-enhancement categories all load on factor 3 under Feedback and reinforcement, although they do not seem to be associated with our positive feedback categories.

A second issue that must be considered when developing a scale for observing preschools is whether one will try to observe the class as a whole or focus on specific children. As I have already indicated our approach was to focus on individual children. Actually two questions are involved here: 1) does averaging across several children in a classroom give a representative picture of that classroom as a whole and, conversely, 2) do observations on the classroom as a whole give an adequate picture of the experiences of individual children in that classroom. With respect to the first question, the picture of classrooms which emerges from use of our instrument is stable enough to differentiate among classrooms even in the same Headstart program. A stronger test of whether the individual child approach yields a representative picture of classrooms would be to determine if it differentiates between different programs in ways that one would predict from knowing the programs' philosophies and goals. Just such a study is currently in the data analyses phase in our laboratory.

For each classroom, observation of individual children will yield a distribution of scores, the number of scores being equal to the number of children observed. Is this distribution completely the result of errors of measurement or does it, at least in part, reflect real individual differences among the children. If the former is the case, then observing the classroom as a whole will give an adequate picture of an individual child's experiences. Since, in general different children in the same classroom are observed on different days what we are really asking is how stable are the observations from one day to another across relatively short periods of time. This rules out, therefore, the possibility of calculating a stability coefficient by the split half method, because the two resulting scores would come from the same days' observations. Since all children were observed at the same times of year differences among children could not be due to differences in season of observation and thus season to season correlations would also be irrelevant. Unfortunately we were not able to obtain the relevant data for this sort of analysis in our study of Headstart classrooms, but we have obtained such data in a subsequent study of model programs. Another, though weaker, indication of whether variation among children in a classroom reflects individual differences is the number of relationships between child characteristics as measured early in the school year and the child's experiences for the whole year, i.e., to what extent do we find child effects. In

our Headstart study we found very little evidence of such effects. The number of significant correlations was barely at chance level. Some of the relationships we found were quite interesting and also quite strong, but given the large number of correlations involved, these will obviously require replication. Thus the jury is still out as to the meaning of within classroom variation on our observation scale.

In summary, we do not think that there is any single approach that can be used to derive a set of variables from a larger set of categories. Two other criteria for example, besides factor analysis, for assessing the meaningfulness of variables might be 1) the extent to which they differentiate between programs in expected ways and 2) the extent to which they predict behavior change in expected ways. Variables which perform well with respect to one criterion may not do so with the other. I do not think it is possible to say which criterion is better. Even though one might be tempted to think that predicting behavior change is the more important, a lack of significant relations may be due to poor or inappropriate dependent measures. Thus we are somewhat skeptical about the possibility of coming up with a set of dimensions which is good for all reasons.

16

WRITE YOUR NUMERALS LIKE THIS

12345
67890

OBSERVER	NAME OF TEACHER	NAME OF SCHOOL	NUMBER: TEACHERS	AIDES	STUDENTS
SUBJECT	DATE OF OBS.	DAY OF OBSERVATION: M T W T F	OBSERVATION NUMBER: 1 2 3 4 5 6	TIME PERIOD: ☐ 1ST ☐ 2ND ☐ 3RD	☐ FALL ☐ WINTER ☐ SPRING

1. 6.
2. 7.
3. B.
4. 9.
5. 10.

1 Activ.
1. Main.
2. Tron.
3. Cog.
4. Soc I.
5. Other

2 Ch. Ac.
1. Str.
2. Un.
3. FrC.
4. SLc.
5. PR:.
6. HRs.

3 Att.
1. Un
2. Mi
3. Mo
4. FA

4 Cognitive Task
1. Visuol Discriminotion
2. Ausitory Discriminotion
3. Somesthetic Discriminotion
4. Quontitotive
5. Lobels
6. Cotegories
7. Informotion
8. Generol Verbal
9. Verbol Recitation
0. Fontossy Expressive
C. Self Expressive
X. Gross Motor
S. Fine Motor
T. Sequential Task

5 Task Q.
1. InAss.
2. Expl.
3. Cons.
4. Soc I.
5. Main.

6 Sociol Behavior
1. Verbal
2. Non-verbol
3. Solicits Fdbk.
4. Sols. Cog. Con.
5. Child Control
6. Socl. Onlookg.
7. Teacher
8. Other Adult
9. Peer or Peers
0. Info. to Peers

7 S.P.
1. So
2. PP
3. AP
4. CP
5. CA
6. 1x
7. 2x
8. 3x
9. 4x
X. SS
O. SI
T. TC

8 Child Affect
1. Positive
2. Negotive
3. Angry
4. Sad
5. Chonge Locus
6. Hi. Mog. Phy. Ob.
7. Hi. Mog. Person
8. Hi. Mog. Ver. Vo.
9. Hi. Mog. Tea. Sa.

9 Re. Con.
1. Com.
2. N.C.

10 Agent Focus
1. Teacher
2. Aide
3. Vist. Tch.
4. Ref. Ch.
5. Ref. Ch. + 1-3
6. Ref. Ch. + 4-9
7. Ref. Ch. + more
8. Oth. Ch.

11 Control Acts.
1. Init.
2. Sus.
3. Term.
4. Re-Dir.
5. Inhib.
6. Mod./Co.
7. Deloy
8. Att. Al.
9. Str. Expecs.

12 Control Tech.
1. Simple Commond
2. Mod. Dirctn.
3. Condtl. Rewd.
4. Cndtl. Gl. Attn.
5. Cndtl. Threat
6. Model
7. Physcl. Mnpltn.
8. Non-vrbl. Symb.
9. Rationale
0. Explicit Choice

13 Cognitive Tasks
0. Visl. Senstizing
1. Visl. Dscrmntn.
2. Audt. Dscrmntn.
3. Smsthc. Dscrmntn.
4. Quantitative
5. Labels
6. Categories
7. Information
8. G.Veb. 9. Reci.
X. Spec. Mot. Skills

14 Cognitive Tech.
1. Emits
2. Demnstrates
3. Elicits
4. Pos. Feedbk.
5. Neg. Feedbk.
6. Mech. Aids
7. Corr. Feedbk.

15 Social Reinf.
1. Teachr. Pres.
2. Pos. Renfct.
3. Neg. Renfct.
4. Fb: Task–Or. Beh.
5. Fb: Product
6. Fb: V.Beh.
7. Fb: Con. Compl.
8. Pers–Evltv.
9. P-Diff. O. IDLABF
X. Acknowldg.–Acc.

1 Activ.	2 Ch. Ac.	3 Att.	4 Cognitive Task	5 Task Q.	6 Social Behavior	7 S.P.	8 Child Affect	9 Re.Con.
1. Main.	1. Str.	1. Un	1. Visual Discrimination	1. InAss.	1. Verbal	1. So	1. Positive	1. Com.
2. Tran.	2. Un.	2. Mi	2. Ausitory Discrimination	2. Expl.	2. Non-verbal	2. PP	2. Negative	2. N.C.
3. Cog.	3. FrC.	3. Mo	3. Somesthetic Discrimination	3. Cons.	3. Solicits Fdbk.	3.AP	3. Angry	
4. Soc I.	4. SLc.	4. FA	4. Quantitative	4. Soc I.	4. Sols. Cog. Con.	4.CP	4. Sad	
5. Other	5. PRs.		5. Labels	5. Main.	5. Child Control	5.CA	5. Change Locus	
	6. HRs.		6. Categories		6. Socl. Onlookg.	6. 1x	6. Hi. Mag. Phy. Ob.	
			7. Information		7. Teacher	7. 2x	7. Hi. Mag. Person	
			8. General Verbal		8. Other Adult	8. 3x	8. Hi. Mag. Ver. Vo.	
			9. Verbal Recitation		9. Peer or Peers	9. 4x	9. Hi. Mag. Tea. Sa.	
			0. Fantassy Expressive		0. Info. to Peers	X.SS		
			C. Self Expressive			O.SI		
			X. Gross Motor			T.TC		
			S. Fine Motor					
			T. Sequential Task					

10 Agent Focus	11 Control Acts.	12 Control Tech.	13 Cognitive Tasks	14 Cognitive Tech.	15 Social Reinf.
1. Teacher	1. Init.	1. Simple Command	0. Visl. Senstizing	1. Emits	1. Teachr. Pres.
2. Aide	2. Sus.	2. Mod. Dirctn.	1. Visl. Dscrmntn.	2. Demnstrates	2. Pos. Renfct.
3. Vist. Tch.	3. Term.	3. Condtl. Rewd.	2. Audt. Dscrmntn.	3. Elicits	3. Neg. Renfct.
4. Ref. Ch.	4. Re-Dir.	4. Cndtl. Gl. Attn.	3. Smsthc. Dscrmntn.	4. Pos. Feedbk.	4. Fb: Task–Or. Beh.
5. Ref. Ch. + 1-3	5. Inhib.	5. Cndtl. Threat	4. Quantitative	5. Neg. Feedbk.	5. Fb: Product
6. Ref. Ch. + 4-9	6. Mod./Co.	6. Model	5. Labels	6. Mech. Aids	6. Fb: V.Beh.
7. Ref. Ch. + more	7. Delay	7. Physcl. Mnpltn.	6. Categories	7. Corr. Feedbk.	7. Fb: Con. Compl.
8. Oth. Ch.	8. Att. Al.	8. Non-vrbl. Symb.	7. Information		8. Pers–Evltv.
	9. Str. Expecs.	9. Rationale	8. G.Veb. 9. Reci.		9. P-Diff. O.IDLABF
		0. Explicit Choice	X. Spec. Mot. Skills		X. Acknowldg.–Acc.

ID No	S	Tcher	Ra			Age

NIH-1693
8-70

17 PRESCHOOL OBSERVATION RECORD

Handout #2

Outline of ICPE Organization

I. Child Categories

A. Interactions with materials

1. Content, e.g. visual discrimination, labels

2. Level of attention

3. Active/passive

4. Structured/unstructured interaction

B. Social interaction and affect

1. Level of social participation

2. Verbal interaction

3. Non-verbal interaction

4. Positive affect

5. Negative affect

II. Teacher Categories

A. Skills and knowledge

1. Content e.g. visual discrimination, labels

2. Technique

3. Free choice/high restriction

B. Controls

1. Prosocial controls

2. Antisocial controls

3. Self control

4. Rationale for requests

C. Monitor of behavior--feedback/reinforcement

D. Praise, enhancement of self worth

Handout #3

Dimensions of Preschool Experience

I. Child Categories

A. Interactions with materials

1. Perceptual activities

a) Visual discrimination

b) Auditory discrimination

c) Somesthetic discrimination

2. Verbal cognitive

a) Labels

b) Categorization

c) Quantitative

d) Information

3. Level of attention

4. Structured/unstructured

B. Social interaction and affect

5. Positive affect

II. Teacher Categories

A. Skills and knowledge

6. Perceptual activities

a) Visual sensitization

b) Visual discrimination

c) Auditory discrimination

d) Somesthetic discrimination

7. Verbal cognitive

a) Labels

b) Categorization

c) Quatitative

d) Information

8. Level of restrictiveness

B. Controls

9. Prosocial controls

a) Initiate

b) Sustain

c) Terminate

10. Antisocial controls

a) Redirect

b) Inhibit

11. Verbally mediated control requests

a) Conditional reward

b) Conditional goal attainment

c) Rationale

12. Nurturance

a) Positive feedback

b) Positive reinforcement

c) Person evaluation

d) Person differentiation

e) Identifying and labeling feelings

f) Acknowledge-accept

Handout #4

PS1 Observation Category Factors

Column 4 -- Child Cognitive Activities

Factor 1

General Verbal (Classroom Rules and Experience Recall)
Categorization
Label
Auditory Discrimination

Factor 2

Visual Discrimination
Fine Motor
Somesthetic Discrimination

Factor 3

Self Expression
Fantasy Expression
Verbal Recitation
Somesthetic Discrimination

Factor 4

Quantity
Label
Information Giving

Column 11 -- Control Activities

Factor 1

Initiates
Inhibits
Attention Alone
Structured Expreience

Factor 2

Sustained
Redirects
Delay
Initiates

Factor 3

Terminates
Modulate Control
Delay (-)

Column 12 -- Control Techniques

Factor 1

Non--verbal Symbol
Conditional Threat
Modulate Direct
Direct

Factor 2

Rationale
Modulate Direct
Physical Manipulation
Direct

Factor 3

Conditional Reward
Direct
Physical Manipulation

Factor 4

Model (-)
Explicit Choice
Direct

Factor 5

Physical Manipualtion
Conditional Goal Attainment

Column 13 -- Teacher Cognitive Activities

Factor 1

Teacher Auditory
Teacher Categorization
Teacher Labeling
Teacher Visual Discrimination

Factor 2

Teacher Verbal Recitation
Teacher Information
Teacher Categorization
Teacher Labeling

Factor 3

Teacher Visual
Teacher General Verbal
Teacher Visual Sensitization
Teacher Specific Motor Skills

Column 14 and 15 -- Feedback, Reinforcement

Factor 1

Negative Reinforcement
Control Compliance
Task Feedback
Positive Reinforcement

Factor 2

Positive Feedback
Negative Feedback
Person Differentiation
Task Feedback

Factor 3

Identification of Labels
Person Evaluation
Person Differentiation
Task Feedback