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ABSTRACT

In a comprehensive junior and senior high school featuring the "open education" approach school officials invited the authors to develop a plan to provide inservice training to teachers using the Spaulding System of Classroom Behavioral Analysis. Data for this study were gathered on 57 students in three groups: (1) those whose teachers received inservice training and took a course in the Spaulding System from the experimenter, (2) those whose teachers received inservice training and feedback from the experimenter, (3) those whose teachers received no inservice training or feedback and did not attend the special class. Data were obtained midyear to provide information on changes in student behavior and to provide terminal data on students who because of scheduling changes would be removed from the classes taught by teachers in the study. Results indicate that findings are in line with the hypothesis that the training of teachers will significantly reduce the frequency of inappropriate coping behavior patterns and give strong support to the effectiveness of the Spaulding System. The Coping Analysis Schedule For Educational Settings (CASES), the primary instrument in the Spaulding System, is included in the appendix. For a related document see ED076694. (Author/RC)

Applications of the Spaulding System of Classroom Behavioral Analysis in Field Settings

Robert L. Spaulding and Beverly Showers

The Spaulding system of classroom behavioral analysis (Spaulding, 1970) employs a baseline set of classroom observations to determine behavioral traits of students, followed by the application of prescribed classroom treatments to be administered by teachers. Student classroom behaviors are first sampled using the Coping Analysis Schedule for Educational Settings (CASES) over a period of one to two weeks in non-teacher-directed learning environments. The non-teacher-directed environment is used because it permits each student to select from a greater range of acceptable behaviors and demonstrate varieties of behavior more in line with his preferred coping style. The baseline CASES data are transformed statistically to provide coefficients representing the saliency or "visibility" of each of six coping styles (See Appendix). The visibility coefficients identify appropriate treatments to be applied in the classroom by school personnel.

The six coping styles and correlated treatments were identified through content analysis of more than two thousand case studies carried out during the period of development of the CASES instrument (from 1961 through 1970). Factor analytic reduction of data gathered during 1973 and 1974 in two inner city and eight suburban schools in Santa Clara and Contra Costa Counties, California, have supported, substantially, the six clusters of categories identifying the coping styles. The major departure found through factor analysis was that task-oriented, productive (Style F) pupils fall into two sub-styles - that is, some prefer to work alone and others seek out other pupils with whom they interact productively and cooperatively. (Results of these factor analyses will be reported in detail at a later time.)

In a previous investigation of disadvantaged students in an experimental primary school program (Spaulding and Papageorgiou, 1972), pupils were found to become significantly more appropriately self-directed, productive and

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socially integrative (Style I) as a consequence of the application of the prescribed, experimental treatments. In a related study of the same population, Papageorgiou (1973), found achievement in MAT Word Knowledge and Reading to be significantly related positively to the percentage of responsible, self-directed and task-oriented (Style F) behavior displayed by pupils in the experimental classrooms at the end of the project. Data for control groups were not available in these investigations and the changes found may have resulted from school influences other than the CASES based experimental treatments.

Other investigators have used CASES as a dependent measure to examine the effects of innovative curricular programs such as Head Start and Follow Through (Thursby, 1970), and variations in group counseling (Palmo and Kuzniar, 1972). These studies utilized control groups, but until now no controlled studies have been completed examining the effects of the prescribed treatments on groups of students in regular classes. Support for the validity of the method has rested, until now, on data obtained in experimental case studies in which treatment reversals were employed to demonstrate effects (Sibley, Abbott, and Cooper, 1969).

CURRENT FIELD APPLICATIONS

The data reported in this paper represent preliminary findings at mid-year at San Ramon Secondary School, California, the site of one of three field studies currently underway. The other two field studies are at Powell School in Mountain View and Burbank School in San Jose, California.

In all three field studies CASES data were gathered before and after the in-service training of teachers. In Burbank and Powell Schools teachers were given feedback on CASES data obtained for every child in their classes, while in the San Ramon study pupils with special problems were selected for pre-test, posttest, and case study analysis. Where funds are adequate the recommended pattern is to gather CASES data on all pupils at the beginning of the school year and then provide feedback to the teachers on the behavior of specific pupils they select for case study analysis. The case studies and attendant feedback process are hypothesized to constitute the best methods by which the teachers may be taught the appropriate treatments.

THE SAN RAMON SECONDARY SCHOOL STUDY

A comprehensive junior and senior high school was recently built in San Ramon, a suburban, residential, predominantly white community in Contra Costa County, California. Data from the 1970 census show that median family income of the school's attendance area was $16,405, median house value was $35,000, 2.3 percent of the families were below poverty level income, 1.6 percent of the residents were other than white, and 7.1 percent of the residents had Spanish surnames.

The new building featured design elements based on the "open schools" or "open education" approach. Large open areas of the building were carpeted and the ceilings were specially designed to absorb sound. Within these open areas study and learning centers were defined by an appropriate arrangement of desks, cabinets, instructional equipment, and resource materials.

Problem

In this new physical setting many pupils were found to demonstrate inappropriate behavior. With the reduction of physical constraints and visual barriers many students were observed to be distracted and others were found engaged in inappropriate social interaction. The school administrators invited the authors to develop a plan to provide in-service training to the teachers using the Spaulding system.

Hypothesis

The effects of training San Ramon Secondary School teachers in the Spaulding system of classroom behavioral analysis and treatment will be to reduce significantly the frequency of inappropriate coping behavior patterns (Styles A, B, C, D) in pupils, and increase appropriately self-directed, productive, and socially integrative (Style F) behavior in contrast to the behavior of a group of controls (where alpha = .05).

Method

Data for this study were gathered on 57 students in three groups:

1) those whose teachers received in-service training and took a course in the Spaulding system of classroom behavioral analysis and treatment from the experimenter (24 students);

2) those whose teachers received in-service training and feedback from the experimenter (17 students); and

3) those whose teachers received no in-service training or feedback and did not attend the special class (16 students).

Eighty-six percent of the sample were boys. Twenty-six percent of the students were enrolled in grade 7; 40 percent in grade 8; 16 percent in grade 9; and 18 percent in grade 10. Table 1 presents the distributions of students and teachers in the three groups.

Table 1

Group Composition and Distribution of Students by Sex and Grade

Group	Sex		Grade Level				Number of Teachers	Number of Pupils
	Male	Female	7	8	9	10		
1	21	3	11	10	1	2	7	24
2	15	2	4	6	3	4	5	17
3	13	3	0	7	5	4	7	16
Totals	49	8	15	23	9	10	19	57
%	86	14	26	40	16	18	-	-

Assignment of teachers to treatment and control groups was by self-selection. Students in each group were chosen because their teachers felt these students exhibited, to some degree, inappropriate classroom behaviors. The school district hired the junior author to provide in-service training and teach a class to those teachers who requested such services. The teachers who enrolled in the class may have been encouraged to do so by the offering of college and district credits applicable toward salary increases. Two teachers in the in-service-only group wished to take the class but could not because of after-school coaching duties.

Procedures

The program of in-service training (chosen by twelve teachers and affecting 41 students) involved the in-class observation of students designated by teachers as exhibiting inappropriate classroom behaviors. The students were observed using CASES once each week for approximately 10 minutes each observation period. Weekly conferences with each teacher allowed the experimenter to describe and discuss student behaviors and instruct teachers in behavior modification techniques, such as shaping, ignoring, reinforcement, and time-out. Teachers were reinforced in class and during conferences by the experimenter for changes in their own behavior and for improved student behaviors. Inappropriate teacher behaviors were ignored.

In addition to volunteering for the in-service training, seven teachers (working with 17 students) elected to take the college extension class. The class was designed as a field study approach to the analysis of teacher-child transactions in on-going classrooms. Field observations, video-tape recordings and other sources of data regarding social, affective, and cognitive transactions were examined. Principles of social learning and operant conditioning were used to derive hypotheses regarding ways of restructuring the classroom environments of selected children to strengthen their pro-social and intellectual performance. Each teacher taking the class obtained reliability using the CASES instrument, became familiar with the six student classroom coping styles and appropriate treatments for each, conducted a case study with one of his own students (in which he observed the student, designed an intervention treatment, applied treatment, analyzed treatment effects, and prepared graphs of all data). The class included approximately 15 additional teachers from other schools not included in the research sample.

It was felt by the experimenter that major differences between the two teacher training approaches would result. Teachers enrolled in the class were expected to gain a better understanding of the goals of treatment, to observe their own and their students' behaviors more objectively, and provide more opportunities for F Style behavior to occur in their classrooms. Although no measurement of these teacher variables was attempted, it appeared to be the case that they required less instruction in learning new management techniques, were quicker to generalize treatment processes to other students, and, in some instances, were more able to generalize appropriately to the entire class.

Data Collection

Some of the baseline and all of the mid-treatment data were gathered by the experimenter. Post-treatment data were collected in March, 1974, by independent observers who were unaware of the group membership of the pupils they observed. All observers obtained satisfactory levels of reliability using CASES before data were collected and were checked periodically during the year to determine if reliability levels remained adequate. Reliability was estimated by the percentage of exact agreement method, using data gathered during eight minutes of synchronized, independent observation in on-going classrooms on a ten-second sampling schedule. Reliability coefficients ranged from a low of .74 to a high of .95, with a median of .90. Baseline data were gathered prior to the identification of the three groups of teachers and the experimenter was unaware of the group identity of the students.

In-service Training and Feedback Procedures

For three months the experimenter observed each of the students in Groups 1 and 2 once a week, and on the basis of the data collected, provided feedback to teachers in uniform fashion. During these observations, the experimenter jotted down informal notes - verbatim actions and statements of teachers and students, reminders (to self) to reinforce certain teacher behaviors, and suggestions to convey to teachers regarding curriculum. Inappropriate teacher behaviors were ignored unless a given teacher, during a conference, referred to them. The experimenter would then reinforce the teacher's growing awareness of his own behavior and appropriate treatment procedures. (After a trusting relationship had developed between teachers and the experimenter, teachers would often begin a conference with a statement such as "I realized as soon as I said...." or "I should have....")

The experimenter developed a comfortable relationship with the several teachers in the two in-service training groups during the half-hour weekly conferences. She was warmly accepting, sympathetic, and non-judgmental. Conferences were confidential and results of in-service training (progress or lack of progress in changing student behaviors) were given to the appropriate teachers only. Teachers were free, of course, to share any results they cared to w

administrators or district evaluators. It was essential, in the experimenter's opinion, to provide a non-threatening atmosphere in which teachers might risk change without fear.

In November, 1973, seven of the twelve teachers receiving in-service training enrolled in a class taught by the experimenter. This class met once a week for 15 weeks, and those enrolled acquired skills in classroom behavioral analysis and treatment in greater depth than those depending on the half-hour weekly conferences for instruction.

At the beginning of January, and immediately after Christmas vacation, the experimenter observed all treatment and control group classrooms for the purposes of determining effects at mid-treatment. The in-service and extension classes were continued through the end of February. Post-treatment data were gathered in early March by independent observers who were not aware of the group membership of the students (or teachers) they observed. Each student was observed on two different days in similar settings by two different observers, and the two sets of data were combined for a single set of posttest scores for each subject.

Results

As has been described, the three groups of teachers and pupils selected represented non-random samples and an inspection of the Fall CASES data indicated that there were likely to be statistically significant differences in initial status between the three groups of students with respect to coping styles. The Fall CASES percentage scores for the 57 students remaining in the three groups at mid-year were transformed to T scores and subjected to a one-way analysis of variance. This analysis indicated that the three groups were significantly different with respect to aggression and negative attention-getting behavior (Coping Style A) and appropriately self-directed, task-oriented, productive behavior (Style F). The summary table for the ANOVA is shown as Table 2.

The results of the t tests of differences between each pair of means indicated that the two groups of teachers volunteering for in-service training nominated students who were significantly more aggressive and disturbing than the students nominated by the control group of teachers. This finding corresponds to the statements made by some of these teachers in the fall: i.e., that they

Table 2

Summary of Analysis of Variance of Pre-treatment Coping Styles

Source	SS_{bg}	SS_{wg}	MS_{bg}	MS_{wg}	df_{bg}	df_{wg}	F	p
Style A	1313.77	3185.55	656.89	58.99	2	54	11.135	<.001
Style B	378.58	4416.93	189.29	81.79	2	54	2.314	ns
Style C	5.16	5502.71	2.58	101.90	2	54	.025	ns
Style D	190.89	5734.64	95.45	106.20	2	54	.899	ns
Style E	455.63	4839.18	227.82	89.61	2	54	2.542	<.10
Style F	1839.56	3158.08	919.78	58.48	2	54	15.727	<.001

Table 3

Results of t Tests of Differences Between Each Pair of CASES STYLE Means (pre-test T scores)

CASES Style	Group	Mn	t	Group	Mn	t	Group	Mn	t
A	1 2	55.56 51.92	1.497	1 3	55.56 43.92	4.697***	2 3	51.92 43.92	2.990**
B	1 2	52.14 52.69	.194	1 3	52.14 46.66	1.878	2 3	52.69 46.66	1.917
C	1 2	50.10 49.38	.225	1 3	50.10 49.83	.083	2 3	49.83 49.83	.128
D	1 2	48.75 51.53	.851	1 3	48.75 53.05	1.293	2 3	51.53 53.05	.424
E	1 2	52.54 48.75	1.264	1 3	52.54 45.76	2.220*	2 3	48.75 45.76	.907
F	1 2	44.13 48.32	1.728	1 3	44.13 57.89	5.577***	2 3	48.32 57.89	3.595***

* $p < .05$

** $p < .01$

*** $p < .001$

did not have any "problems." The students in Groups 1 and 2 were also found to be significantly less appropriately self-directed, productive, and task-oriented (Style F) than those in Group 3. The relevant statistics are presented in Table 3.

CASES data were obtained during the mid-year before the in-service program was completed to provide information on changes in student behavior at mid-treatment and to provide terminal data for those students whose spring semester schedules would remove them from the classes taught by the teachers in the study.

Results reported here are preliminary and are presented in lieu of the end of treatment data which will be process shortly. Final results will necessarily be based on a smaller sample of pupils due to attrition in January and February.

The current findings are in line with the hypothesis. Decreases in mean CASES scores for Styles A, B, and D were found in Groups 1 and 2. The control students had higher means in Styles A, B, and D. Style C means were observed to be relatively stable in all three groups.

All groups showed increases in mean scores for conforming behavior (Style E).

The goal of increasing Style F behavior was achieved in both treatment groups, with Group 1 making the largest mean gain. In contrast, the Style F mean dropped in the control group. These data are presented graphically in Figure 1.

An analysis of covariance was made of the mid-treatment Style scores to test for significance of the differences in means between the three groups. The results indicated that no significant differences existed between groups (for any Coping Style) at mid-treatment. The statistics are given in Table 4.

Summary and Discussion

Significant decreases in Style A (aggression) were found by January, 1974, in both treatment groups (beyond the .05 level of probability) in comparison with the slight increase noted in the control group.

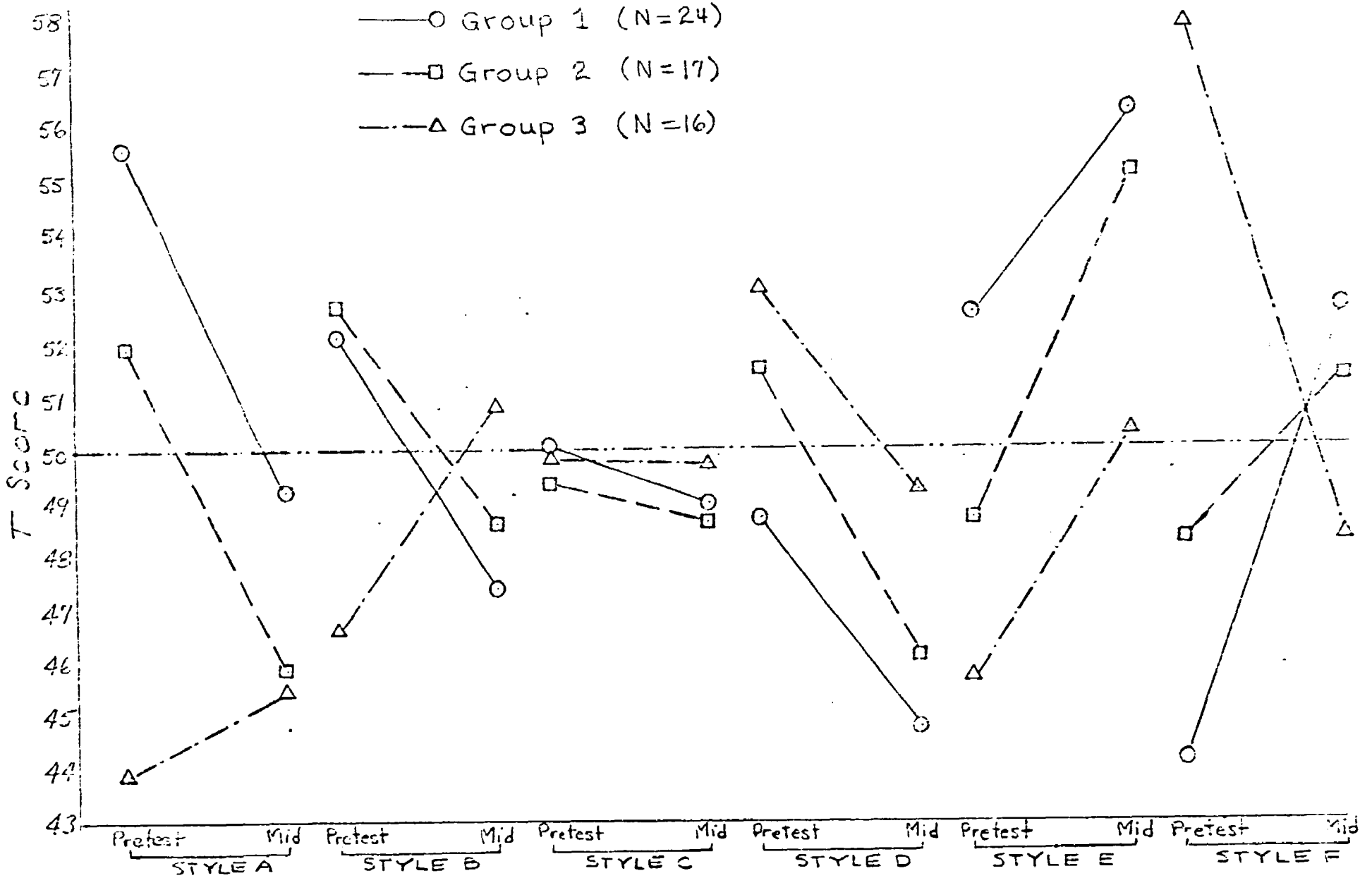

Fig. 1. Pretest and mid-treatment means for six Coping Styles by treatment group.

Table 4

Summary of Analysis of Covariance:
Coping Styles at Mid-treatment
(*T* Scores adjusted for initial status)

Group	*N*	Measure	Coping Styles at Mid-treatment (*T* Scores) A	B	C	D	E	F
1	24	*Mn*	49.23	47.43	48.99	44.80	56.29	52.66
		SD	8.20	9.48	10.39	8.33	10.39	7.34
		Adj Mn	47.45	47.43	48.94	45.55	55.47	53.97
2	17	*Mn*	45.84	48.64	48.68	46.15	55.17	51.37
		SD	6.76	8.49	8.82	9.05	9.09	8.25
		Adj Mn	45.55	48.36	48.75	45.88	55.37	51.61
3	16	*Mn*	45.50	50.84	49.76	49.27	50.38	48.39
		SD	7.17	13.70	13.74	15.21	11.98	10.19
		Adj Mn	48.48	51.43	49.76	48.45	51.38	46.17
		F(2,53)	.733	.718	.040	.412	.837	2.694
		p	*ns*	*ns*	*ns*	*ns*	*ns*	<.10

Significant increases in Style F (appropriately self-directed, task-oriented, productive behavior) were found in both treatment groups in comparison with a mean loss in Style F behavior in the control group.

The effects of the two teacher training methods were very similar. At mid-treatment, no significant differences between them were found. Roughly parallel effects are apparent in Figure 1. These results suggest that the more efficient of the two methods of training is in-service training with weekly observations of students and weekly feedback conferences. The major differences in effects between the two teacher training methods, by mid-year, appeared to be that students of teachers in Group 2 made relatively greater gains in Style E (conforming behavior) and gained less, relatively, in Style F behavior.

In contrast to students in both treatment groups, students in Group 3 displayed increased aggression (Style A), more resistance and passive aggression (Style B), and less appropriately self-directed, task-oriented, and productive (Style F) behavior (in relation to their baseline data).

Students in all three groups displayed less Style D (inappropriate, peer-oriented, socially integrative) behavior at mid-year. Style C (withdrawn) behavior remained unaffected by the treatments and appeared to be relatively stable in all three groups from baseline to mid-year.

The results obtained in the San Ramon study, at mid-year, give strong support to the effectiveness of the Spaulding system of behavioral analysis and treatment in ameliorating some behavior problems displayed by junior and senior high school students.

References

Palmo, A. J., & Kuzniar, J. Modification of behavior through group counseling and consultation. *Elementary School Guidance and Counseling*, 6(4).

Papageorgiou, M. R. Using CASES in measuring effects of compensatory education. Article based on a paper presented at the annual meetings of the American Educational Research Association, February 28, 1973, New Orleans, Louisiana.

Sibley, S. A., Abbott, M. S., & Cooper, B. P. Modification of the classroom behavior of a disadvantaged Kindergarten boy by social reinforcement and isolation. *Journal of Experimental Child Psychology*, 1969, 7(2), 203-219.

Spaulding, R. L. *Classroom behavior analysis and treatment*. San Jose State College: Author, 1970.

Spaulding, R. L., & Papageorgiou, M. R. Effects of early educational intervention in the lives of disadvantaged children. Final Report, June, 1972, California State University, San Jose, Project No. 1-I-124, Contract No. OEC-9-72-0005(057), National Center for Educational Research and Development.

APPENDIX

THE COPING ANALYSIS SCHEDULE FOR EDUCATIONAL SETTINGS (CASES)

The Coping Analysis Schedule for Educational Settings (CASES) was developed over a period of approximately seven years as a result of more than 2,000 case studies of normal children in on-going public school classrooms, Head Start centers, and other educational settings. Its categories are based on ego theory and reflect a number of dimensions of personality development.

It was designed to measure the process of normal personality development and socialization occurring in structured settings. It consists of 13 basic categories of "coping" behaviors[1] identified by descriptive statements. Subscripts are added to six categories to allow coding of child behavior in terms of adult or cultural expectations (as determined by the setting). The augmented list numbers 19 categories. A brief form of CASES is attached.

CASES categories are arranged with more active coping categories grouped at one end and more passive categories at the other, but the numerals do not represent a scale. Various psychological dimensions were used in the development of the schedule. Basic to its development were the concepts of "integrative" and "dominative" social behavior as delineated in the work of H.H. Anderson (1939, 1943). In addition to the generally "active" and "passive" styles of child response to environmental stimuli, CASES includes categories which reflect "overt aggression," "passive aggression," "independence," "autonomy," "dependence," "avoidance," and "withdrawal."

The Coping Analysis Schedule for Educational Settings (CASES) permits the coding of all observable behavior in the classroom into one or another of

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[1] The term "coping" and many of the ideas implicit in CASES came from the work of Lois Murphy, especially from her book, Methods for the Study of Personality in Young Children. New York: Basic Books, 1956.

the 19 categories. Of the 13 basic categories, all but one, "responding to internal stimuli" (12), are designed to characterize a person's economy with the external environment. How a given individual manages this economy is assumed, in this system of analysis, to be of crucial importance in the development of his social relations and, ultimately, his overall cultural adequacy. The particular categories delineated in CASES were refined empirically through individual case studies conducted by students and research personnel at the Universities of Illinois, Hofstra, and Duke over a period of seven years. In its present form CASES provides a comprehensive technique of characterizing overt coping behavior in the classroom (or in any social setting). Combinations of category frequencies are normally used to produce coefficients representing six "styles" of coping behavior and an overall coefficient which reflects an individual's overall coping competency in the type of settings observed. The six styles are based on the literature on personality development and are identified by letters and descriptive terms as follows:

Style A: Dominative, active, annoying, bothering, controlling
Style B: Resistant, passive aggressive, delaying, cautious
Style C: Dependent, passive, withdrawn, fearful, watchful
Style D: Talkative, peer dependent, social, gregarious
Style E: Obedient, submissive, compliant, conforming, cooperative
Style F: Assertive, thoughtful, socially integrative, productive

The instrument is open ended in the sense that it may be used by a variety of teachers and researchers for a variety of goals. It is useful as a means of measuring change in the overall process of socialization as well as providing day to day feedback to teachers on the effectiveness of specific techniques of classroom management and instruction. It has been used effectively with children as young as two. It has also been used to measure coping styles in adults in retirement homes, university classes, and hospital wards. Attempts to use it with severely autistic children have been generally unsuccessful since most or all of the observed economy with the environment in their case is unconventional and difficult to interpret in ego terms.

CASES data can be taken continuously or by means of time sampling techniques. Individual profiles or group norms by category or style can readily

be obtained. The most useful analysis involves the use of CASES "style" Coefficients or an Overall CASES Coefficient of coping competency (See attached worksheet). The Overall CASES Coefficient was found in one study to be related significantly to achievement in reading and vocabulary development. (Spaulding and Papageorgiou, 1972).

Observers can be trained in approximately two to three weeks. It is customary to obtain reliabilities of observation and recording in the high eighties or low nineties. The primary method of training is simultaneous observation of selected children (displaying differing coping "styles") by two observers. Data are gathered first by the method of specimen description (followed by coding of the specimen description outside the classroom) and later by coding in the setting as the behavior occurs (on first a 30 and then a 15 or 10 second sampling schedule).

Group training is conducted by means of video tape recordings. The same procedure is used as in the live situation, although the video tape arrangement permits replay and analysis at each point in the flow of behavior. With video tape equipment it is possible to omit the use of specimen descriptions and obtain reliability by coding short sequences on video tape and then reviewing the sequences several times to clarify coding disagreements.

Data are gathered normally using a data sheet with columns marked for each CASES category. The totals for each category are then transferred to the work sheet to obtain the six Style Coefficients and the Overall CASES Coefficient (See attached worksheet).

The Style Coefficients are designed to reflect the responses of teachers and others to the type of child behavior described by each CASES Coping Style. When a Style Coefficient reaches a value of 1.00 the behavior pattern is defined as dominant and it is readily "visible" to most observers. The "visibility" threshholds for each of the six CASES Coping Styles were obtained empirically and reflect the common awareness of teachers to types of pupil

behavior is conventional or traditional school settings. The coefficient value of 1.00, therefore, is a relative value and is useful, primarily, as a rule of thumb in determining the type of classroom treatment most likely to be effective in modifying the process of socialization for a given child. Style E and F Coefficients, also, have been found to be distributed approximately normally in several conventional settings and can be used as behavioral objectives in specific classroom intervention programs. For example, a target value of 1.00 in Style E behavior in teacher-directed settings or in Style F in all settings can be used as a performance criterion.

The Overall CASES Style Coefficient is especially useful as a target variable since it is weighted to reflect cultural expectations in normal personality and social development. It has been found normally distributed and correlated positively with reading and vocabulary development.

Construct validity has been suggested by the ease by which teachers and others familiar with child development and personality theory have obtained reliability of observation and recording. Significant correlations of the Overall CASES Coefficient with achievement test scores (Metropolitan Achievement Test) found in a sample of 180 economically disadvantaged primary school children give further support to the construct validity of the instrument (Papageorgiou, 1972).

References

Anderson, H.H. *The measurement of domination and of socially integrative behavior in teachers' contacts with children.* Child Development, 1939, 10 (2).

Anderson, H.H. *Dominative and socially integrative behavior, child behavior and development.* New York: McGraw Hill, 1943.

Papageorgiou, M.R. *Using CASES in measuring effects of compensatory education.* Paper presented at the 1973 annual convention of AERA, New Orleans, LA, 1973.

Spaulding, R.L., & Papageorgiou, M.R. *Effects of early educational intervention in the lives of disadvantaged children.* Final Report, USOE Project #1-I-124, San Jose: California State University, San Jose, 1972.

A Coping Analysis Schedule
for Educational Settings (CASES)*

(Brief Form for Quick Reference)**

1. Aggressive Behavior:
Direct attack: grabbing, pushing, hitting, pulling, kicking, name-calling; destroying property: smashing, tearing, breaking.

2. Negative (Inappropriate) Attention-Getting Behavior:
Annoying, bothering, whining, loud talking (unnecessarily), attention getting aversive noise-making, belittling, criticizing.

3. Manipulating, Controlling, and Directing Others:
Manipulating, bossing, commanding, directing, enforcing rules, conniving, wheedling, controlling.

4. Resisting:
Resisting, delaying; passive aggressive behavior; pretending to conform, conforming to the letter but not the spirit; defensive checking.

5. Self-Directed Activity:
Productive working; reading, writing, constructing with interest; self-directed dramatic play (with high involvement).

6. Paying Close Attention; Thinking, Pondering:
Listening attentively, watching carefully; concentrating on a story being told, a film being watched, a record played; thinking, pondering, reflecting.

7. Integrative Sharing and Helping:
Contributing ideas, interests, materials, helping; responding by showing feelings (laughing, smiling, etc.) in audience situations; initiating conversation.

8. Integrative Social Interaction:
Mutual give and take, cooperative behavior, integrative social behavior; studying or working together where participants are on a par.

9. Integrative Seeking and Receiving Support, Assistance and Information:
Bidding or asking teachers or significant peers for help, support, sympathy, affection, etc., being helped; receiving assistance.

** Revised August 12, 1968.

10. Following Directions Passively and Submissively:
Doing assigned work without enthusiasm or great interest; submitting to requests; answering directed questions; waiting for instructions as directed.

11. Observing Passively:
Visual wandering with short fixations; watching others work; checking on noises or movements; checking on activities of adults or peers.

12. Responding to Internal Stimuli:
Daydreaming; sleeping; rocking or fidgeting; (not in transaction with external stimuli).

13. Physical Withdrawal or Passive Avoidance:
Moving away; hiding: avoiding transactions by movement away or around; physical wandering avoiding involvement ctivities.

Note: Categories 3, 5, 6, 7, 8, and 9 are further coded as a or b in structured settings to indicate appropriate or inappropriate timing or location of activity (based on the teacher's expectations for the setting). Example: 5a would be recorded when a child was painting during art period (when painting was one of the expected activities). Painting during "story time" or in an academic setting would normally be coded 5b. The code b represents behaving in a certain coping category at the "wrong" time or place. What is "right" or "wrong" is based on the values and goals of the teacher or authority responsible in a given situation.

A child might be sharing with another child in an integrative manner (7) some bit of information the teacher regarded as highly inappropriate. It would be coded as 7b since it was an integrative act of sharing occurring at the "wrong" time in the "wrong" place, from the point of view of the teacher.

School Lawrence (Teacher: Moore) Observer C.R.

Grade 2nd (Sally Lindley) Date 4/26/71

CASES Data Sheet

Beginning Time 10:12 End Time 10:19

Setting (situation and activity) Group meeting to discuss information to be used in filling out an information sheet about a grocery store. Teacher directed, listening, watching, oral response setting (CTD-LV-A-6)

Time	CASES CATEGORY 1	2	3	4	5	6	7	8	9	10	11	12	13	STARS* Teacher	Cog.	Soc.	Notes and Setting Changes
:00						1											
10							1										
20								1									
30										1							
40											1						
50						1											
1:00								b									
10								b									
20							1										
30					b												
40							1										
50										1							
2:00						1											
10					b												
20											1						
30											1						
40											1						
50											1						
3:00						1											
10						1											
20									1								
30					b												
40								1									
50							1										
4:00										1							
10											1						
20												1					rubbing face
30										1							
40										1							
50					b												
5:00										1							
10										1							
20										1							
30					b												
40					b												
50					b												
6:00						1											
10		1															
20					b												
30	1																
40							b										
50							b										
Σ a	1	1				6	4	2	1	8	6	1					
Σ b					8		2	2									

*Teacher behaviors are coded immediately following CASES time samples. STARS codes are used in itive (cog.) or social behavior (soc.) columns as appropriate.

1. Sample record sheet to gather pupil data using CASES and STARS.

CASES Computation Work Sheet

School: Lawrence Teacher: Moore Observer: C.R. Date: 4/26/72

Subject (Child's code name): Sally L. Setting: TD-LV-A-O (Group Meeting)

CASES	f
1	1
2	1
3a	
3b	
4	
5a	
5b	8
6a	6
6b	
7a	4
7b	2
8a	2
8b	2
9a	1
9b	
10	8
11	6
12	1
13	
Σf	42 (1)

STYLE A

1	1
2	1
3b	
Total A	2 (2)
(2) ÷ (1) =	.05 (3)
(3) ÷ .03 =	1.67 (A)

STYLE B

4	
5b	8
6b	
Total B	8 (4)
(4) ÷ (1) =	.19 (5)
(5) ÷ .10 =	1.90 (B)

STYLE C

9b	
11	6
12	1
13	
Total C	7 (6)
(6) ÷ (1) =	.17 (7)
(7) ÷ .15 =	1.13 (C)

STYLE D

7b	2
8b	2
9b	
Total D	4 (8)
(8) ÷ (1) =	.10 (9)
(9) ÷ .15 =	.67 (D)

STYLE E

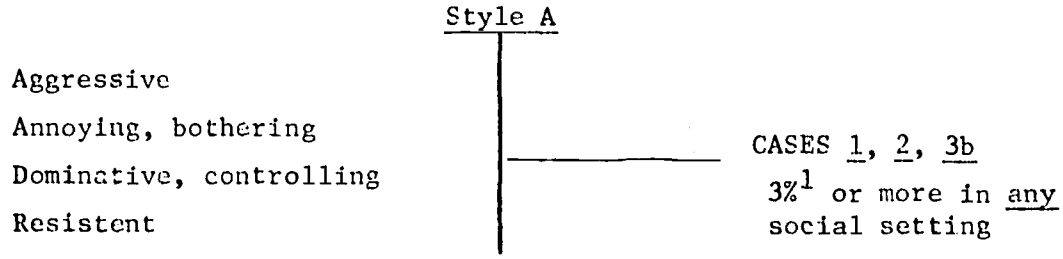
5a	
7a	4
9a	1
10	8
Total E	13 (10)
(10) ÷ (1) =	.31 (11)
(11) ÷ .80 =	.39 (E)

STYLE F

3a	
5a	
6a	6
7a	4
8a	2
Total F	12 (12)
(12) ÷ (1) =	.29 (13)
(13) ÷ .85 =	.34 (F)

Overall CASES Coefficient

Step 1		Step 2			Step 3	Step 4
Style A Coefficient	1.67 (A)					
" " B " "	1.90 (B)	(14) ÷ (15) =	.77	x 1 =		.77
" " C " "	1.13 (C)					
Sub-Total (A+B+C)	4.70 (14)					
Style D Coefficient	.67 (D)	÷ (15) =	.11	x 2 =		.22
" " E " "	.39 (E)	÷ (15) =	.06	x 3 =		.18
" " F " "	.34 (F)	÷ (15) =	.06	x 4 =		.24
Total (A+B+C+D+E+F)	6.10 (15)	Total	1.00	Total		1.41



Treatment Schedule[1]

1. Set strict, narrow limits (set specific routine to follow). Give no choices, set specific concrete academic tasks.
2. Assign to specific work station (to work alone).
3. Instruct individually or in groups of 6 or fewer.
4. Supervise closely (do not leave child unattended).
5. Punish all unacceptable behavior immediately by social isolation (time-out from reinforcement).
6. Reinforce all emerging desirable behavior (100% schedule).
7. Ignore visual wandering (11) and daydreaming (12).

Special CASES Classification and Treatment (For Style A)

Isolate	Ignore	Reinforce
CASES 1, 2, 3b	CASES 4, 5b, 6b, 7b, 8b, 9b, 11, 12, 13	CASES 3a, 5a, 6a, 7a, 8a, 9a, 10

[1] Note: Use this treatment when Style A behavior is predominant (above 3% or a visibility coefficient of 1.00) during baseline observations extending a minimum of 5 days in a given setting. Discontinue this treatment when Style A behavior remains below 3% (below a visibility coefficient of 1.00) for 10 days in the settings observed. Then shift to the treatment for the Style currently predominant.

Style B

Passive aggressive, resistant

Delaying

Watchful, cautious (May be sullen or hostile)

CASES 4, 5b, 6b

10% or more in any social setting

Note: A child may exhibit this style without ever having learned integrative, cooperative, or conforming behaviors. Or he may have become hostile and resistant in a punitive or dominative environment after having been fully socialized in a mo e benign environment. Treatment will differ depending on these two differential histories (see next page for treatment of pupils not previously socialized).

Treatment Schedule[1]

(Assuming child was once socialized)

1. Set relatively broad limits (do not set a strict routine). Provide many choices in terms of conditions and circumstances of work and task undertaken.
2. Permit child to select his own work station and rate of work.
3. Use indirect teaching techniques, avoid direct commands or confrontations.
4. Do not supervise closely but remain nearby to reinforce appropriate behavior by giving novel material to use or responsibilities commensurate with task performance.
5. Ignore resistance and delay (4) but punish (by isolation or withdrawal of privileges) any active aggression (1) or domination (2, 3b).
6. Reinforce all emerging task oriented, productive behavior with increments of freedom, tokens, or privileges (avoid social approval).
7. Ignore dependent, submissive, and passive conformity.

Special CASES Classification and Treatment

(For Style B)

Isolate	Ignore	Reinforce
CASES 1, 2	CASES 3b, 4, 5b, 6b, 7b, 8b, 9b, 10, 11, 12, 13	CASES 3a, 5a, 6a, 7a, 8a, 9a

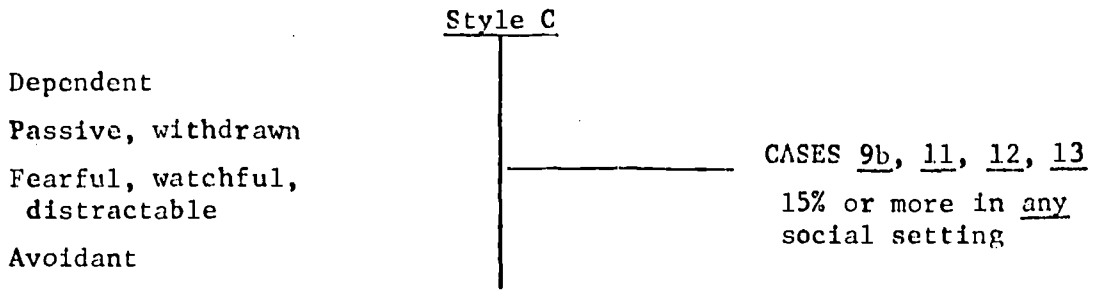
[1] Note: Discontinue this treatment when Style B behavior remains below 10% (a visibility coefficient of 1.00) in all settings for 10 days. Shift to the treatment schedule for the Style currently predominant.

Treatment for Pupils with Persistent Style B Behavior

If the pattern of resistance and delay (4) persists (remains above 10% after 20 days of treatment) use the following treatment:

Isolate	Ignore	Reinforce
CASES 1, 2, 4, 5b	CASES 3b, 6b, 7b, 8b, 9b, 11, 12, 13	CASES 3a, 5a, 6a, 7a, 8a, 9a, 10

Note: Punish resistance and delay (4) by isolation and reinforce conformity (10) if Style B behavior remains above 10% 20 days after treatment is begun. The assumption here is that the pupil has never been fully socialized and delaying tactics must be weakened to permit new, more appropriate operants to occur and be reinforced.



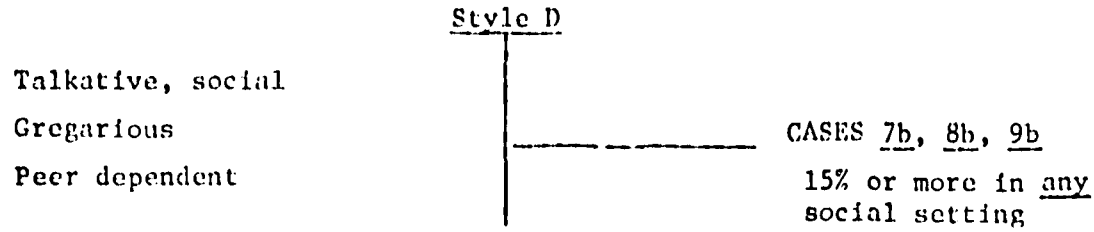
Treatment Schedule

1. Set narrow, clearly defined limits (set specific routines). Give no academic choices; set specific, concrete academic tasks; provide structure at all times.
2. Assign to specific work station near supportive peers.
3. Instruct individually or in groups of six or fewer.
4. Stay nearby to provide structure and support.
5. Use "pump priming" to get behavior started, then reinforce it.
6. Do not punish; ignore aggressive behavior (if it occurs).
7. Reinforce all emerging active, pro-social or productive behavior.
8. Ignore anti-social aggressive, withdrawn, or dependent behavior.

Special CASES Classification and Treatment
(For Style C)

Isolate	Ignore	Reinforce
(Do not punish unless CASES 1 and 2 rise above 3% in any setting)	CASES 1, 2, 3b, 4, 5b, 6b, 7b, 8b, 9b, 10, 11, 12, 13	CASES 3a, 5a, 6a, 7a, 8a, 9a

Note: Discontinue this treatment when Style C behavior remains below 10% in all settings for 10 days. Shift to the treatment for the Style currently predominant.



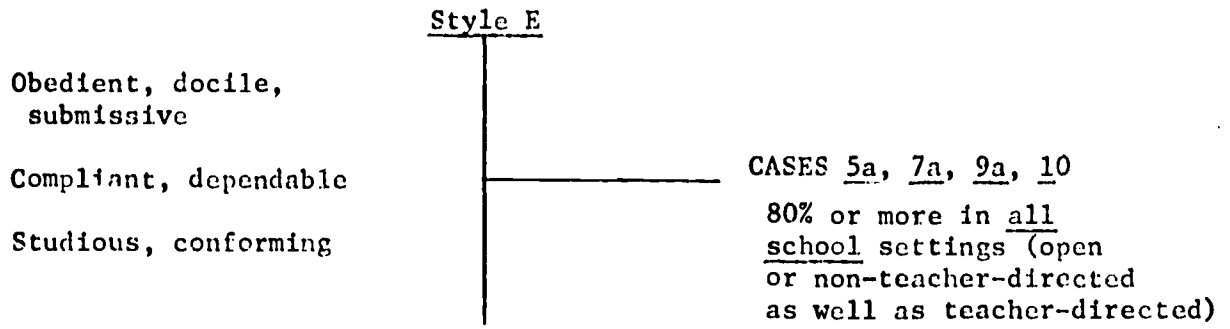
Treatment Schedule

1. Set narrow, clearly defined limits (set specific routines). Provide no choices involving interaction; gradually increase choices among concrete academic tasks.
2. Assign to specific work station. After Style D behavior is reduced gradually involve other students by specific assignment to work with Style E or F pupils.
3. Instruct in groups of six to ten.
4. Stay nearby to apply reinforcements (and sanctions).
5. Punish unacceptable behavior by social isolation (after verbal cautioning).
6. Reinforce all emerging desirable behavior.
7. Ignore teacher-dependent behavior.

Special CASES Classification and Treatment
(For Style D)

Isolate	Ignore	Reinforce
CASES 1, 2, 3b	CASES 4, 5b, 6b, 7b, 8b, 9b, 11, 12, 13	CASES 3a, 5a, 6a, 7a, 8a, 9a, 10

Note: Discontinue treatment when Style D behavior remains below 10% in all academic or instructional settings for 10 days. Shift to the treatment schedule for the Style currently predominant.



Treatment Schedule

1. Set relatively broad limits. Permit many academic and social choices, both in terms of conditions and circumstances of work but also the task to be undertaken. Increase structure and reduce choice when anxiety occurs.

2. Permit and encourage child to select his own work station and companions.

3. Instruct in medium sized groups (10-12 persons) when introducing new concepts or skills (use direct, expository instruction for new skills and indirect, structured discovery techniques for important new concepts).

4. Do not supervise closely, but return periodically to reinforce productivity, innovation, independence and choices.

5. Withdraw freedom to make academic and social choices as necessary to control misuse of time (restore freedom after an appropriate time).

6. Reinforce all emerging task oriented academic and social behavior (5a, 6a, 7a, 8a). Ignore conformity (10).

7. Ignore minor disturbances (2) and minor inappropriate independent or social interaction (3b, 5b, 7b, and 8b).

Special CASES Classification and Treatment
(For Style E)

Isolate	Ignore	Reinforce
CASES 1 (above 3%)	CASES 2, 3b, 4, 5b, 6b, 7b, 8b, 9b, 10, 11, 12, 13	CASES 3a, 5a, 6a, 7a, 8a, 9a

Note: Treatment for Style E designed to produce Style F behavior. Shift to Style F treatment when Style F behavior remains above 85% for 5 days or so. Return to Style E treatment if Style F behavior drops below 85% (a coefficient of 1.00) for 2 or 3 days in a row.

Style F

Independent
Productive
Responsible
Assertive
Integrative
Thoughtful

CASES 3a, 5a, 6a, 7a, 8a

85% or more in those school settings involving cognitive stimulation, concrete content, and an high degree of choice. (When severely constrained, this type of child may display Style B or Style E)

Treatment Schedule

1. Set very broad limits. Permit wide latitude for academic and social choices.

2. Permit and encourage child to select own task, work station, task procedures and companions.

3. Do not instruct directly. Set academic goals in terms of parameters of problems to be solved. Provide structure as needed to foster discovery of concepts, principles, and generalizations.

4. Do not supervise. Schedule periodic seminars or conferences to review activities and results of effort.

5. Increase structure when anxiety or frustration occurs - i.e., provide guidelines as needed but do not direct.

6. Reinforce cognitive analysis, conceptualization, generalization of principles, evaluation, and application of principles (or new skills when appropriate).

7. Ignore minor inappropriate use of time and/or materials. Ignore minor inappropriate social interactions, dependency and conformity.

Note: The special CASES Category Classification and Treatment for Style F is the same as that for Style E (Table 11). Return to Style E treatment (or to the treatment for the predominant Style observed) if Style F behavior drops below 85% (a coefficient of 1.00) for 2 or 3 days in a row.