

FOCUS ON EXCEPTIONAL CHILDREN

A Matching Model for Educating the Emotionally Disturbed and Behaviorally Disordered

H. Lyndall Rich

Special educators long have been involved in a search to identify *the* teacher, operating *the* program that is most effective for emotionally disturbed and behaviorally disordered students. However, if special educators acknowledge that teacher styles vary considerably, that programs differ cognitively and affectively, and that disturbed/disordered students demonstrate a variety of human responses and learning styles, they must conclude that no single teacher and no single program is most effective for all disturbed/disordered students. Consequently, the search might be more profitably directed if special educators sought to determine which teachers, operating which programs, were most effective for which students.

During the past few decades, numerous publications have presented intervention strategies for educating exceptional children—particularly the behaviorally disordered and emotionally disturbed. In the main, these publications have recommended the use of specific procedures, most of which are presented in theoretical terms, without consideration for alternate approaches. This dogmatic situation exists, even though “. . . there is no doubt that pupil problems, teacher reactions, and program types are mutually independent” (Morse, Cutler, & Fink, 1964, p. 129).

Garner (1976), in an effort to conciliate the theoretical separatism, particularly between the “Skinnerians” and the “Rogerians,” called for a combined treatment program, because emotionally disturbed and behaviorally disordered children need “. . . both behavior modification and feeling oriented therapy” (p.317). Other observers of the educational process have recommended comprehensive changes which go beyond the identification of program intervention types. Rubin (1973), for example, believes that a teacher’s natural style “. . . be conjoined both with the pupil’s natural learning style and with a particular method . . .” (p.31). With reference to preschool disturbed children, Braun, Mathilda, and Lasher (1969) reached a similar conclusion: “Perhaps there are children who could profit more from one style than from another . . . This may indicate that certain aspects of teaching style could be matched with certain developmental stages of children” (p.617).

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This article proposes an educational "matching" procedure to increase the effectiveness of intervention strategies, focusing on varying objectives, implemented by teachers with varying styles, for students functioning on varying developmental-behavioral levels. Although the procedure for estimating the initial "match" is a *nomothetic* (Greek *nomos* = law) model, it should not be conceptualized as a static product, but an evolving process or *idiographic* (Greek *idio* = personal) model which facilitates the individual student's progressive development. Nor is the model intended to be limited to emotionally disturbed and behaviorally disordered students; related research and theory indicate that the "matching" concept is applicable to all teaching-learning environments, including general, special, and higher education.

Recent developments in the identification of more effective educational procedures have taken the form of person-environment interaction (Hunt, 1974) or aptitude-treatment interaction (ATI) (Cronbach & Snow, 1977). In short, ATI is the systematic adaptation of instruction based upon learner attributes and for which there is a predictable outcome. If a teacher decides a learner within a classroom group has a poor self-concept and the teacher, therefore, uses planned praise to increase the self-concept of the individual learner, an ATI construct is utilized.

Research, however, has not systematically produced the designs or data necessary to identify and justify the variables within a global "matching" construct (Bracht, 1970). "One reason for the host of experimental comparisons resulting in nonsignificant differences may be simply that methods optimal for some students are detrimental to the achievement of others" (McKeachie, 1963, p. 1157). In short, research efforts designed to measure the effects of a teacher style, or a learner characteristic, or an intervention program, have failed to account for the differential effects attributable to the co-existing independent variables. Thus, the application of a singular treatment on a random and undifferentiated population tends to "wash-out" the differential—or interaction—effects.

Research specifying differential aptitudes or characteristics and differential treatments has produced results that support the "matching" or ATI procedure (Warren, 1969; Hunt, 1974; Cronbach & Snow, 1977; and Rich & Bush, 1978). In general, the studies have demonstrated that populations assessed to be functioning on different behavioral-psychological dimensions perform differently under the influence of specified treatments. Reynolds and Balow (1972), in a review of interaction studies, reached a similar conclusion: ". . . interactions between pupil characteristics, teaching methods, and material suggest that the teacher would be more or less effective depending on the decisions he made to match the teaching system to the pupil" (p.364).

In addition to the research results, educators have long known that "matching" or ATI does exist. To state that interaction does not exist ". . . is to assert that whichever educational procedure is best for Johnny is best for everyone else in Johnny's school. Even the most commonplace adaptation of instruction, such as choosing different books for more capable and less capable readers of a given age, rests on an assumption of ATI that seems foolish to challenge" (Cronbach & Snow, 1977, p.492). At this point in time, however, "matching" procedures have minimal priority, are infrequently implemented and, often, intuitively conceptualized. To maximize the projected effects of a "matching" model, two basic questions must be answered:

1. Which intervention strategies, educational objectives, teacher variables, and student variables are most relevant?

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2. How will these four variables be related to produce significant effects?

INTERVENTION STRATEGIES

Special educators have been inundated with literature, research, and training models that emphasize a specific intervention strategy for teaching disturbed/disordered students. Intervention programs such as "behavior modification," "psychoeducational," and "open education" have been advocated unilaterally without consideration for characteristics of the student, objectives to be achieved, or style of the teacher. Obviously, a singular program, based on a set of theoretical principles, is not equally applicable for all students or all teacher styles.

Rhodes and Tracy (1972) define an intervention as "... a mediational process which enters into the variant reciprocity between a child and his world, to affect that reciprocity, and to promote a different outcome than would have been expected without such interposing" (p.27). The specific intervention strategies, or interposing, have been developed from theories which "... employ the same basic methodology ..." (p.2); "... share a common orienting outlook ..." (p.2); and "... agree

regarding basic amelioration ..." (p.3). Based upon these assumptions, five categories of theory were identified: (1) biophysical, (2) behavioral, (3) psychodynamic, (4) sociological, and (5) ecological.



The sequence is not random, but a logical progression, with the first theory (biophysical) "... representing the most individual and physical focus ..." and the last theory (ecological) representing "... the most universal and complex focus" (p.5). Each of the five theories or models "... purports to be a representation of the causes, dimensions, and explanations of all human behavior" (Rhodes & Tracy, 1972, p.23).

The conceptualized intervention strategies follow essentially the same progressive sequence as the theory construct—that is, from a specific, concrete, behavioral focus to a global, inferred, affective focus. This qualitative dimension is critical if teacher style, educational objectives, and student characteristics are to be "matched" effectively. The hypothesized relationships between the theoretical models of causality and the individual intervention strategies are presented in Table 1.

The biophysical theory, with an individual-physical focus, is consistent with the structured strategy, which focuses on specific, concrete, and cognitive goals. The

Table 1

Continuum Relationship Between Causality and Interventions

Continuum of Causality	Theories of Causality	Educational Intervention Strategies	Continuum of Goals
Physical-Individual  Universal complex	Biophysical	↔ Structured Engineered Classroom	Specific, Concrete, Cognitive  Global, Inferred, Affective
	Learning-Behavioral	↔ Behavior Modification	
	Psychodynamic	↔ Psychoanalytic Psychoeducational	
	Sociological*	↔ Open Education	
	Ecological*	↔ Intrapersonal	

*Frequently combined and referred to as *Environmental*.

relationship implies that students diagnosed as brain-injured, for example, require a controlled program that may utilize sensory reduction, task analysis, sequential programming, and consistency. If the problem is one of learned deviance, the appropriate strategy is behavior modification, which emphasizes the shaping of behavior through systematic application of reinforcements.

The psychoanalytic model, which has been the traditional responsibility of medicine and psychiatry, emphasizes psychological causes and treatment procedures (Achenbach, 1974). Behavioral symptoms, then, are indirect expressions of psychic problems that have their roots in early childhood-parental experiences. The theory of causality, therefore, includes both an individual and social focus; intervention similarly requires a careful blend of structure and insight.

The open education intervention strategy emphasizes development of self-concept and ego strength in an environment that promotes involvement, interaction, and personal growth through positive and caring relationships. Although the strategy has tenets of the psychoanalytic strategy, concepts such as treatment and insight are discarded in favor of self-determination and personal exploration.

The intrapersonal strategy, synonymous with self-determination or personal freedom, is not so much a model as an ideological position that emphasizes the rights of students to make choices regarding their life styles and educational goals. Neill (1960), Moustakas (1966), and Rogers (1969) advocate personal freedom since most behavioral-psychological conflicts are a result of social and ecological factors that impinge on the individual.

The engineered classroom (Hewett, 1968) and the psychoeducational (Fagen, Long, & Stevens, 1975) strategies are eclectic approaches which borrow from several models. The former strategy emphasizes features of the cognitive goals, and the latter strategy leans more toward an affective orientation.

As the models of causality and interventions proceed along the hierarchy, they become more universal and complex, emphasizing more global, inferred, and affective goals. Because of the increasing universal and complex nature of the relationship, the task of specifying examples for each causal model and intervention strategy becomes more difficult and theoretical. As a general guide, however, successive steps along the hierarchy place increasingly less emphasis on the individual as the

source of maladaptive behavior or disturbance, with a commensurate decrease in intervention control over the individual. This qualitative dimension is critical if teacher style, educational objectives, and student characteristics are to be matched effectively.

TEACHING STYLES

The characteristic manner in which a teacher fulfills the ascribed classroom leadership role in an educational environment is called a *teaching style*. As with student behaviors, the number of potential variables involved in the teaching process is infinite. Teacher characteristics such as flexibility, warmth, objectivity, knowledge, and training have been subjected to research analysis that has resulted in contradictory or inconclusive findings. Nevertheless, because teacher style is reported to be relatively permanent for a given teacher and because teacher influence on student behavior is relatively great, a more fruitful conception of teacher style is warranted.

The construct traditionally used to describe teaching style has been ascribed to a continuum of teacher-centered behaviors. In the final analysis, this teaching style dimension can be described as representing an external-internal control continuum. Although the descriptive nomenclature may vary (e.g., authoritarian-democratic, direct-indirect, or controlled-reflective), the critical factor is the exercise of power by the teacher. "In essence, the . . . continuum involves the extent to which the teacher makes decisions for the child" (Kauffman & Lewis, 1974, p. 281).

Terms such as *direct*, *dominant*, and *authoritarian* styles are reported to be characteristic of *external* control approaches in which the interaction and objectives are more inclusively regulated by the teacher. *Indirect*, *reflective*, and *democratic* styles have been associated with *internal* control approaches in which students assume intrapersonal and interpersonal regulation. Thus, internal teaching styles are characterized by a limited exercise of control and more facilitative interaction patterns.

Exemplary teacher style behaviors, characteristic of the external-internal continuum, are identified as direct-indirect by the Flanders (1965) Interaction Analysis system. In the Flanders system, direct teacher style behaviors consist of: lecturing, information giving, providing directions, criticizing, and justifying authority.

These behaviors restrict student freedom and set limits or focus attention. Indirect teacher style behaviors, on the other hand, increase student freedom and reduce limits, by asking questions, building on student ideas, responding to feelings, praising, and encouraging. Although the two extremes provide a clear distinction on the direct-indirect continuum, a teacher rarely demonstrates behaviors from only one extreme and excludes the other. More often, teachers demonstrate a blend of direct-indirect behaviors, relying more heavily upon style behaviors in one direction.

The controversy over the desirability and efficacy of external-internal styles has been the subject of educational research and literature for several decades. For example, Bills (1956) states that the idea of self-discovered learning (internal style) is as effective as traditional procedures (external style) in learning course content and more effective in achieving personal adjustment.

The conclusions reached by Bills have not been supported entirely. Stern (1962), in a review of studies dealing with learning environments, found that only one research report (Faw, 1949) actually demonstrated that the internal-oriented style resulted in significantly greater mastery of subject matter. More recently, Bennett (1976) concluded that formal or traditional teacher methods (external style) demonstrated superiority over informal styles in student acquisition of academic skills.

McKeachie (1962) is in basic agreement with both Stern and Bennett. He concluded that students achieved lower scores on content examinations with internal styles, which indicated a "... weakness, at least in achieving lower-level cognitive goals" (p. 328). Stern, however, reaffirms the findings that an internal style is associated with more positive personal adjustment.

The extent to which the teacher controls the classroom, or makes decisions for the child, correlates with both intervention strategies and educational objectives. The operation of a structured or behavior modification strategy, which requires stringent time and behavioral schedules, measured in small hierarchical increments, is more consistent with the external teacher style. Teachers using behavior modification, however, provide verbal praise for appropriate behavior—which falls within the internal teacher style. Similarly, dynamic strategies that emphasize feelings, freedom, and reflection are more consistent with internal teacher styles. But, when limits are set or information is provided, "internal teachers" are

demonstrating external style behaviors. Teachers within the psychoeducational strategy demonstrate a relatively even mixture of external-internal behaviors, with the direction determined by the feeling-behavioral level of the students and the objectives to be accomplished.

EDUCATIONAL OBJECTIVES

The nature of the educational objectives to be achieved by the learner is a significant part of the intervention strategy and total "matching" concept. Educational objectives, such as those constructed by Bloom (1956) and Krathwohl, Bloom, and Masia (1956), have been presented in the form of taxonomies or a hierarchy of educational outcomes. In the main, the two taxonomies identify major classes of educational outcomes which form a cumulative hierarchy from simple, concrete objectives to complex, abstract objectives (see Table 2).

Although the controversy regarding the validity of the hierarchical arrangement has produced some disagreement over the direct and cumulative links between classes of objectives, research generally supports the relevance of the taxonomies (Madaus, Woods, & Nuthall, 1973).

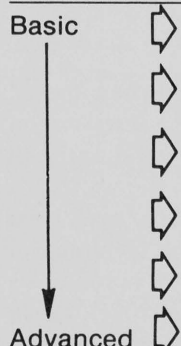
In terms of the "matching" model, a critical concern is to determine which strategies and teaching styles are most effective for achieving which objectives. Research with both typical and exceptional children, using a variety of methods and strategies, including teacher styles, has yielded some consistent patterns. Structured or external control methods have demonstrated significantly superior results in student achievement of lower-level cognitive goals, such as attending, knowledge, and comprehension (Wright & Nuthall, 1970; Salomon & Achenbach, 1974). Secondary-aged students, however, are reported to both prefer and achieve higher level objectives with internal or experiential methods (Flanders, 1965; Hamachek, 1969; Scheuer, 1971).

Anderson (1959) summarizes the effects of authoritarian and democratic methods on learning outcomes:

Democratic leadership is associated with high morale when the primary group goal is social . . . or emotional catharsis, as in the case of the therapy group. Morale is higher under authoritarian leadership, however, in groups which are primarily committed to some task goal rather than social-emotional goal. There is wide agreement that authoritarian leadership is most effective when the task is simple and concrete (p.204).

Table 2

Major Classes of Educational Objectives

Hierarchy		Cognitive Objectives		Affective Objectives
Basic 		Knowledge	←————→	Receiving (Attending)
		Comprehension	←————→	Responding
		Application	←————→	Valuing
		Analysis	←————→	Organization
		Synthesis	←————→	
	Advanced		Evaluation	←————→

Thus, accomplishment of an educational objective, by its nature and hierarchical position, can be said to be facilitated by the use of procedures (both strategy and teacher style) that are consistent with the objective. In short, basic, lower-level objectives which are concrete and specific tend to be more readily achieved by learners in educational environments that are concrete and specific (e.g., structured and behavior modification strategies). Advanced, higher-level objectives which require more elaborate cognitive and affective processing are achieved more readily by learners when the environment encourages interaction and social-emotional exploration (e.g., psychoeducational and open education strategies).

STUDENT DEVELOPMENTAL BEHAVIORS

Within the fields of education and psychology, learner variables such as intelligence, achievement, attitudes, acculturation and an array of demographic traits have been used to predict student responses to learning environments. For the vast majority of students, these variables have correlated significantly with cognitive and affective performance. The traditional variables

identified and subsequently researched, however, have not demonstrated interaction or "matching" effects, nor have they accounted for variance in the disturbed/disordered population. Therefore, traditional variables are tentatively rejected for consideration in the "matching" process.

Literature in education and in developmental and clinical psychology reveals a number of generalizations regarding the relative severity of selected maladaptive behaviors. For example, several models (Swap, 1974; Andrews & Bartolini, 1964) have attempted to synthesize child development theories into a hierarchy or continuum, postulating representative behaviors for developmental levels; but ranking behaviors on a continuum of development is a hypothetical construct which should be interpreted with caution and flexibility. This is particularly evident since the theoretical positions are not equally amenable to rigorous comparison nor does such a continuum account for individual variance.

An analysis of the theories advanced by Freud (Hall, 1954), Maslow (1965), Erikson (1965), and Piaget (Flavell, 1963) and the research by Hunt (1971), Rotter (1966), Kagan and Moss (1962), and Peck and Havighurst (1960), is interpreted to reveal a number of consistent behavioral patterns that can be ranked developmentally. Characteristic learner behaviors within

these constructs constitute behaviors corresponding to developmental levels or stages. Thus, students diagnosed as disturbed or disordered would be functioning on a level different from their chronological counterparts in the normal population. Although disturbed/disordered students generally would be expected to function on lower levels, *different level* is stressed since the characteristics of some students functioning on a higher level may not be valued or understood, and therefore labeled disturbed or disordered.

Alfred Baldwin (1967) examined six theories of child development, including those of Kurt Lewin, Sigmund Freud and Jean Piaget, and concluded that the theories were “. . . not so much contradictory as unrelated” (p. vii). For Baldwin, the theories “. . . are concerned with different aspects of child development more than they are focused on different explanations of the same behavior. This fact suggests eclectic integration of the theories provided that they can be reconciled in language” (pp. 597-598).

A summary compilation of the behaviors presumed from the theories, holding individual variance constant, indicates the following continuum of severity: (1) unsocialized; (2) protective (withdrawn, compulsive, and dependent); (3) defining or testing (negativistic, aggressive, and assertive); and (4) independent. The relationship between the theories and the synthesized behaviors is presented in Table 3. Although certain relevant constructs are not included in the table (e.g., Rotter's Locus of Control; Kohlberg's Stages of Moral Development; Piaget's several developmental constructs), the omitted developmental theories are consistent with both the continuum hierarchy and the behavior synthesis. The four levels of developmental behaviors, including the subcategory behaviors, represent progressive development; however, the distinction between some behaviors is relatively minor and may be a function of individual manifestation rather than severity.

Unsocialized behavior, evidenced by egocentrism, extraordinary impulsivity and hyperkinesis, represents the most basic or youngest developmental behavior. This behavior manifestation is characteristic of infants who are operating on a self-fulfilling, demand-response pattern, wherein the behavior is to achieve immediate, even irrational, gratification.

Protective behavior (withdrawn, compulsive, and dependent), which is normally experienced during early

childhood, consists of patterns of behavior that are designed to identify and predict major elements of the environment without risking physical or psychological pain. Protective behaviors often approximate the behaviors of individuals considered externally controlled when consequences are “. . . typically perceived as the result of luck, chance, fate, as under the control of powerful others” (Rotter, 1966, p. 3). Withdrawn behavior, or movement away from people, is evidence of social awareness, but apprehension, anxiety, or fear prevents interaction. Compulsive and dependent behaviors represent an evolution from withdrawal in that the child's focus shifts from noninteraction to stringent compliance with norms, or subservient association with people. The distinction between compulsive and dependent behavior may be little more than a semantic one, but ritualistic compliance with relatively permanent norms is considered less threatening and more predictable than dependency, which is subject to the variant responses in adults.

Defining behavior (negativistic, aggressive, and assertive) or behavior intended to test the environment for personal limits, is an attempt to determine the relative power and control possessed by the child. In effect, the child is emerging as an internally controlled individual (Rotter, 1966), perceiving consequences as a result of one's own actions. Negativistic behavior, or behavior which minimizes the potential performance and credibility of oneself, is an attempt to validate the extent to which the child can produce self-consistent responses. Aggressive behavior that is goal oriented (i.e., a controlled response to conflict) is a reasonable indication that the child has acquired power and is attempting to define the self within the environment. Uncontrolled aggression, on the other hand, is more consistent with behaviors of the unsocialized child and should be treated accordingly. Assertive behavior is an extension of aggressive behavior. At this level, however, power is exercised in a forceful but more socially accepted manner.

Independent behavior—the pinnacle in terms of the hierarchy—represents a child who has resolved, at least temporarily, the more basic needs. In short, the child has satisfactorily resolved the psycho-social crises appropriate for this chronological age; the personality is regulated by the ego; the safety needs have been met; the behavior is regulated by a sense of cooperation; and the individual is internally reinforced.

Table 3
Relationships Among Theory Stages and Behavior Synthesis

FREUD Stages of Personality	MASLOW Motivational Hierarchy	ERIKSON Psycho-social Crises	PECK & HAVIGHURST Character Types	BEHAVIOR SYNTHESIS
Id	Physiological Security	Trust vs. Mistrust	Amoral	Unsocialized
Ego*	Personal Security Physical	Autonomy vs. Doubt	Expedient	Protective Withdrawn Compulsive
Superego	Psychological	Initiative vs. Guilt	Conforming	Dependent
Ego**	Self Esteem	Industry vs. Inferiority	Irrational- Conscientious	Defining Negativistic
		Identity vs. Role Diffusion	Rational- Altruistic	Aggressive
	Belonging and Love, etc.***	Intimacy vs. Isolation etc.***		Assertive
				Independent

* emergence of limited reality orientation and ego control

** personality with fully functioning and regulating ego

*** highest levels not included since they are inappropriate for non-adults.

NOTE: The levels or stages listed horizontally across the top of the table are considered the most basic or lowest developmentally; conversely, those listed across the bottom of the table are the highest or most advanced. Relationships among the theories are determined by their horizontal proximity across the columns.

THE "MATCHING" MODEL

Research studies repeatedly have concluded that "... certain kinds of teachers fit better into certain kinds of programs, and that certain children are more ready to respond to one or another program types" (Morse, Cutler, & Fink, 1964, p. 129). Consequently, recent theory constructs (Bloom, 1976; Joyce & Weil, 1972) have attempted to conceptualize school learning as a function of differential student characteristics and methods of teaching. Although the potential number of variables is infinite, the number has been reduced to a relatively few critical variables that can be used to explain differences in outcomes. Bloom (1976), for example,

identified "... three interdependent variables which are central to ... theory of school learning; ... student characteristics, instruction, and learning outcomes" (pp. 10-11).

The "matching" model presented in this article similarly has focused on a reduced number of variables: learner behavior, teacher style, educational objectives, and intervention strategies. Each of the variables was operationalized on a continuum representing a hierarchy of behaviors and factors.

The theoretical positions and behavioral factors included in this article constitute a remarkable degree of consistency. Table 4 presents the four variables considered in this article; each factor is represented by a

continuum, arranged in hierarchical fashion, which reflects progressive change or adaptation. Thus, the table is to be read horizontally to determine the “match” between and among the four variables.

Knowledge and receiving objectives, for example, require a structured strategy, implemented by a direct teacher. A similar strategy and teacher would be required for children whose behavior is characterized as unsocialized. In short, children functioning on the basic levels are “. . . lacking important basic skills, who need direction and protection until they can acquire them” (Joyce & Harootunian, 1967, p. 95). The opposite continuum extremes suggest grossly different “matched” factors. Children who are independent or assertive, or who are attempting to meet higher level objectives, are best facilitated in more “open,” dynamic environments with indirect teachers.

Factors falling between the two extremes would require proportionate shifts among the remaining factors. As learners achieve educational objectives, or behavior changes to a more advanced level, the inter-

vention strategy and teacher style would need to shift accordingly. The shift may involve phasing out tangible rewards, eliminating a limit, introducing the child to a problem-solving group, or, as Garner (1976) has suggested, combining behavior modification with feeling-oriented therapy.

Obviously, not all of the four factors will constantly “match” across the table. Therefore, the “match” must be viewed with flexibility, considering the elimination of a factor that is not necessary or is consistently mismatched with the remaining factors.

Educators need to facilitate the movement of children who are functioning on the basic levels to the higher levels. Thus, direct teachers must become, in progressive steps consistent with changes in the learner, less direct. Structured, external control environments must evolve into self-directed, internal control programs. And objectives must progress from the specific, concrete knowledge and receiving levels to higher order cognitive and affective objectives.

Table 4
Teaching-Learning “Matched” Factors

Interventions (Causal Theories)	Objectives: Cognitive (Affective)	Teacher Style	Developmental Behaviors
Structured (Biological) Engineered Class	Knowledge (Receiving)	Direct, Authoritarian, Concrete, or Cognitive ↑ ↓	↔ Unsocialized
Behavior Mod. (Behavioral)	Comprehension (Responding)		↔ Protective ↔ Withdrawn ↔ Compulsive ↔ Dependent
Psychoanalytic (Psychodynamic)	Application (Valuing)		↔
Psychoeducation (Sociological)	Analysis (Organization)		↔ Defining (Testing) ↔ Negativistic ↔ Aggressive ↔ Assertive
Open Education (Ecological)	Synthesis (Characterization)		↔
Intrapersonal	Evaluation	Indirect, Democratic, Reflective, or Affective	↔ Independent

RESEARCH DOCUMENTATION

The "matched" model presented here is a theoretical conception that has limited research support. Although no study has been conducted which tests the totality of the matching model, documentation supports the interaction between selected variables. Dietrich (1966), for example, studied the behavioral effects of direct, indirect, and behavior modification classroom structures on children diagnosed as neurotic, unsocialized, antisocial, and psychotic. Although the study was plagued with numerous limitations, Dietrich concluded that "... the children did behave differently in each condition . . . (which) tended to confirm the predictions of the specific kinds of behaviors each type of child would be expected to display in the different class structures" (pp. 69-70).

Rich (1969), in a study of classroom climates for the emotionally disturbed, found that direct and indirect teachers had a differential effect on dominant (acting-out and conduct problem) and nurturant (withdrawn and passive) children. Whereas nurturant children instructed by direct teachers demonstrated greater achievement, time at task, and affective perception, dominant children achieved similar gains with indirect teachers. The alternative arrangement (direct-dominant and indirect-nurturant) produced significantly lower scores on all three dependent measures. This study was replicated with normal children (Rich, 1973) using a classification construct of social-emotional development. The interaction effects between student development and teacher style were supported.

Hunt (1971, 1974), Warren (1969), and Wood (1975) have developed related theoretical models and investigated the interaction effects between selected student characteristics and environmental factors. Hunt's model uses the level of student development, based on a continuum of interpersonal maturity, matched with an environment defined by the amount of structure. "The Conceptual Level development model is an interactive theory of development which considers development progression or growth to be determined both by the person's present development stage and by the environment he experiences" (Hunt, 1974, p.24). Hunt additionally has provided an enormous amount of data supporting the interaction construct.

Warren (1969) hypothesized that different kinds of treatment programs conducted by different kinds of

workers would have differential effects on different kinds of delinquents. Delinquents classified according to personality and interpersonal maturity (I-level) were commensurately matched on a continuum of treatments ranging from clear, concrete structure to the development of insight through therapy. Warren concluded that delinquents "... who were well matched with their treaters have much higher success rates than those who are not well matched" (p.47).

Wood (1975) similarly has articulated a different treatment method for young disturbed children. In essence, the program consists of stages of child development matched with stages of therapy. Each state "... requires a different emphasis, different techniques, and different materials and experiences" (p.7).

The research presented in support of the matching model of this article does not justify acceptance of the model, but sufficient evidence exists to conclude that there is a strong interaction effect between and among the factors. Obviously, the specific factors included in this model, including the hypothesized relationships, require greater specificity and research documentation.

A matching model is needed in the education of emotionally disturbed and behaviorally disordered students. Special educators need to develop a procedure by which children are introduced to intervention strategies appropriate to their behavioral-developmental level and the objectives. The conclusion stated by Morse, Cutler, and Fink (1964) remains appropriate today: "There is no doubt that certain kinds of teachers fit better into certain kinds of programs, and that certain children are more ready to respond to one or another program types" (p.129). This "matching" model has been presented as a procedure by which the best fit can be accomplished among the teacher-learning factors.

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CLASSROOM FORUM

Edited by Debby Gilbert
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I teach a class for six-year-olds suspected of having learning disabilities. A student in my class is having a great deal of trouble with fine motor skills, particularly handwriting. We began with gross movements on the blackboard, working from large forms and writing to smaller forms until I thought he was ready to start working on chart paper. He has had a lot of trouble making this transition and does not produce the same quality of work on the chart paper as he did on the blackboard. What is the specific problem, and how can I help him progress to chart paper, then to tablet paper?

This child may encounter several problems if we break down the task he is being asked to perform. First, he is being asked to move from one plane to another when he moves from writing on the blackboard to chart paper on a table or desk—that of vertical to horizontal. Second, if he has visual-motor problems, he probably has been taught to write using the kinesthetic-to-auditory-to-visual motor method; therefore, he may have difficulty revisualizing what he wants to write from the way it looked on the blackboard to the way it should be on the chart paper. Too, the writing tools used are likely to be different—chalk, crayon, marker, and/or primary pencil. Each instrument feels different and is held differently.

The most common approach to teaching this type of child to write is the kinesthetic to auditory to visual motor method. That is, the child is told to close his eyes while his arm, hand, and fingers are guided in the directional patterns the instructor wishes. While his eyes are closed, the instructor verbalizes the pattern with him.

Then he is asked to make the same movement pattern watching what he does. Afterward, he duplicates the pattern on a blackboard. The kinesthetic picture obtained from this method is quite different from the one he will get when he sits down at a desk or table to write on the chart paper. For example, on the blackboard his hand may move down to form a straight line, whereas on paper at a desk he must bring the line toward himself. So the problem may be one of space constancy and possibly poor body concept. Terminology the instructor uses also will be different—"down" on the board would have to be "toward" on paper at a desk.

Instead of having the child proceed from blackboard to desk, try taping the chart paper on the blackboard next to his blackboard exercises. Have him repeat those exercises on the chart paper until he is comfortable with the paper. Then move the chart tablet to an easel or slanted position, and finally to a desk. After mastering these spatial planes, he should be ready to work to the smaller primary tablet after you have gradually cut down the size of the chart paper to approximate the size of the tablet. For some children with fine motor problems, it helps to tape the paper to the desk in the proper position for writing. Keep in mind that your verbal directions, color coding, and directional arrows will assist greatly in making each spatial change.

Asking the child to close his eyes as he writes on the chart paper and then asking him to reproduce the pattern with his eyes open may give him the freedom of confidence to listen to your auditory directions and remember his kinesthetic movement patterns more automatically. Continuing this method as you gradually change the planes in which he is writing may help him be more relaxed and comfortable.

If he is experiencing problems in grasping and manipulating the writing instruments, measures should be taken to make transitions more smoothly. Chalk is held differently from writing utensils used on chart paper. Care will have to be taken in showing him how to hold each new writing tool. Moving from chalk to possibly a magic marker, then to large crayon, and then to the primary pencil might be a good sequence. Also, at first ask him to close his eyes while you mold his fingers into the correct position around the writing tool.

We wish to thank Mrs. Nancy Halpern, Learning Disabilities Teacher, Oak Grove Elementary School, DeKalb County, Georgia, for her contribution to this column.