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## AN INTERACTION PARADIGM: THEORETICAL AND PRACTICAL VARIABLES

### INTRODUCTION

Clinical services personnel in the schools, primarily counsellors and psychologists, have found it difficult to interpret, and, in many cases, justify their role in the total educative process. Because many school districts are without any clinical services, the administrators are faced with a serious problem of planning without specialized and knowledgeable help. There is a growing need for an integrated, meaningful basis for viewing instruction and clinical services, as both related and necessary. The central problem is to create a design placing theory and practice into a relevant setting which will connect the broad goals of education established by a school district to the recent theoretical and empirical advances of psychology and education. This article attempts to provide an interaction paradigm clarifying and ordering the necessary considerations. There is ample support for belief that a need exists to establish a closer working understanding between planners, administrators, and personnel in clinical services, as well as a closer link between theory and practice (Forehand, 1966; Adkins, 1967; Zingle & Winship, 1967). The helping services have existed for some time, but they have existed, for the most part, without coordination or the bond of a common philosophy or purpose (Adkins, 1967).

Clinical services in the schools usually embrace a team approach with personnel from medicine, psychology, counselling, and social work. Thus, the school physician, the school nurse, the psychologist, the counsellor, and the school social worker form the ideal organization. The reality of our day, unfortunately, is not very close to this ideal. In many schools those persons most frequently hired by school boards as a matter of course are the counsellor and the school psychologist. The large urban school districts usually have the sophistication and financial resources to provide for the full team.

Why have we said that clinical services personnel in the schools have found it difficult to interpret their role in the total educative process? There are several reasons. The most important is the heavy work load. In attempting to function with inadequate staffs, both in numbers, and frequently inadequacy of training, clinical services personnel find themselves bogged down in routine interviews and examinations, with little time to aid in planning and innovative aspects of interaction with administrators. Counsellors and psychologists see the work load pile up. Scientific advances in empirical and theoretical endeavors demand attention, interpretation and implementation within the schools. But there is little time for keeping up with theory and bringing it into practice. The heavy work load tends to prevent the necessary communication between administration and clinical services.

## THE STARTING POINT

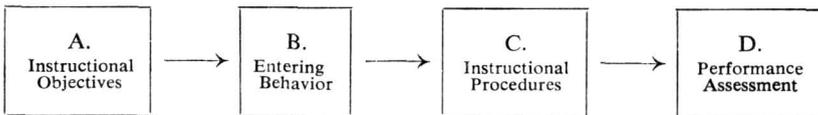
Clinical services in the schools must be seen as desirable and necessary by the community, school planners, administrators, and teachers. There are still school districts without counsellors and psychologists because the top level administrators still see the role of the school as development of the cognitive domain exclusively. This traditional approach is now outmoded. Schools must be fully committed to the development of pupils for a better life in terms of personality adjustment and mental health as well as adequacy in academic and vocational channels (Hoxter, 1968). The Hall-Dennis Report, *Living and Learning* (1968), focuses upon a total approach:

The underlying aim of education is to further man's unending search for truth. Once he possesses the means to truth, all else is within his grasp. Wisdom and understanding, sensitivity, compassion, and responsibility, as well as intellectual honesty and personal integrity will be his guides in adolescence and his companions in maturity (p.9).

An important thesis of this paper is that a provision must be made in the planning of curricula and services to include implementation of broad activities based on both the cognitive and affective domains. Philosophies of education must be worked out on the basis of community needs as well as provincial and national needs. These needs reflect our culture both present and past. As De Cecco (1968) put it:

Philosophies of education deal with the goals and values educational systems embrace and propogate. They include not only Western philosophy and political theory from that of Socrates to the latest brand of existentialism but also the ideas of those schools of psychology like psychoanalysis and phenomenology which are broad value orientations to modern life. Their primary concern is with ends rather than means, and their importance lies in keeping us aware of the alternative goals of all our educational efforts. (p.9).

Given a desirable basic philosophy of education, with goals and aims, a reasonable practice is to employ theories and models that relate to the philosophy. The purpose in using theories and models is that such practice gives order, clarity, and accountability to implementation. Eliminated are random, ill-founded guesses, and structures based on change, simply for change. A well-known model in education is provided by Glaser (1962).



This model very simply but effectively shows the process of planning based on educational philosophy and instructional objectives at Step A, assessment of pupil readiness for instruction at Step B, instructional procedures at Step C, and performance assessment, or evaluation, at Step D.

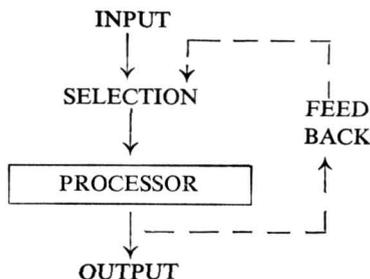
We need a philosophy to guide us, but theories and models generate action pathways to conceptualize our aims. The theories tend to be more related to the lawful, scientific relations underlying practice while the models serve as conceptual analogues, replicas, or routes of theory confirmation (Hoxter, 1967).

## PROCESS

Counselling service is but a part of the total scheme of school services. It is a sub-set of clinical services which is a sub-set of the total process of education. In a view of clinical services embedded in the total process of education, several themes stand out. There is a need to establish communication between theory and practice, communication between administration and clinical services personnel, and integration of the inter-active elements of the cognitive-affective domain. The cognitive-affective domain is inherently the basic sub-structure of learning. Both a curriculum and its behavioral objectives are in fact processes (Forehand, 1966). An effective communication system within school planning with clear processes is a logical plan. A scientific model which enables explanation of physical, intra-personal, interpersonal, and cultural aspects of events is advocated by Ruesch and Bateson (1968). They use their model to illustrate man's communication system:

- (a) to receive and transmit messages and to retain information
- (b) to perform operations with the existing information for the purpose of deriving new conclusions which were not directly perceived and for reconstructing past and anticipating future events.
- (c) to initiate and modify physiological processes with his body
- (d) to influence and direct other people and external events . . . (p.17).

Communication involves information processing as well as information giving. It involves feedback. The phenomena of feedback, whether in a mechanical gadget, such as a self-guided missile, or in a living being, is always dependent upon information—information that is fed back: insight into how much of the assigned mission is not yet accomplished and what remains to be done (Bayles, 1967, p.75). Cybernetics theory, or feedback, is nicely illustrated by Powell (1967) in a description of a Primitive Learner Model based on a self-sustaining system having the three related characteristics of input, information analyzing (or processing), and output. One purpose of this approach is to show that an individual learns to modify his behavior, or learn, as he is influenced by internal and external changes.



THE PRIMITIVE LEARNER MODEL

## INTER-RELATIONSHIP OF COGNITIVE-AFFECTIVE DOMAINS

It is not a very profound task to create a philosophical base leading to the development of theories, models and action innovation, designed to foster cognitive-affective growth. The question might be asked how can the

cognitive and affective be handled together? The writer does not feel it is fruitful to separate these domains theoretically, empirically, or practically. Human thinking begins in an intimate association with emotions and feelings (Neisser, 1963). Support for linking the cognitive and affective areas is gained from several sources. The notion of triadic consistency is one. According to Insko and Schopler (1967), the basic tenet of triadic consistency theory is a tendency for attitudes, cognitions, and behaviors to be consistently related. Simon (1967) discusses the relationship of motivation and emotion to cognition. He has proposed a theory in this connection which links motivation and emotional behavior to man's information-processing behavior. Another important study investigated behavior in the form of speech acts in relation to variables such as anxiety, emotional arousal, and cognitive functioning (Reynolds and Paivio, 1968). Pribram (1967) stresses the impact of sensory and neuroendocrine processes on neural information processing. In looking at the neurology and biology of emotion, Pribram sees it as a structural representation of brain mechanisms analogous to an information processing servosystem. As Young (1966) emphasizes, affective processes have an objective existence within the nervous system. According to Pinneo (1966):

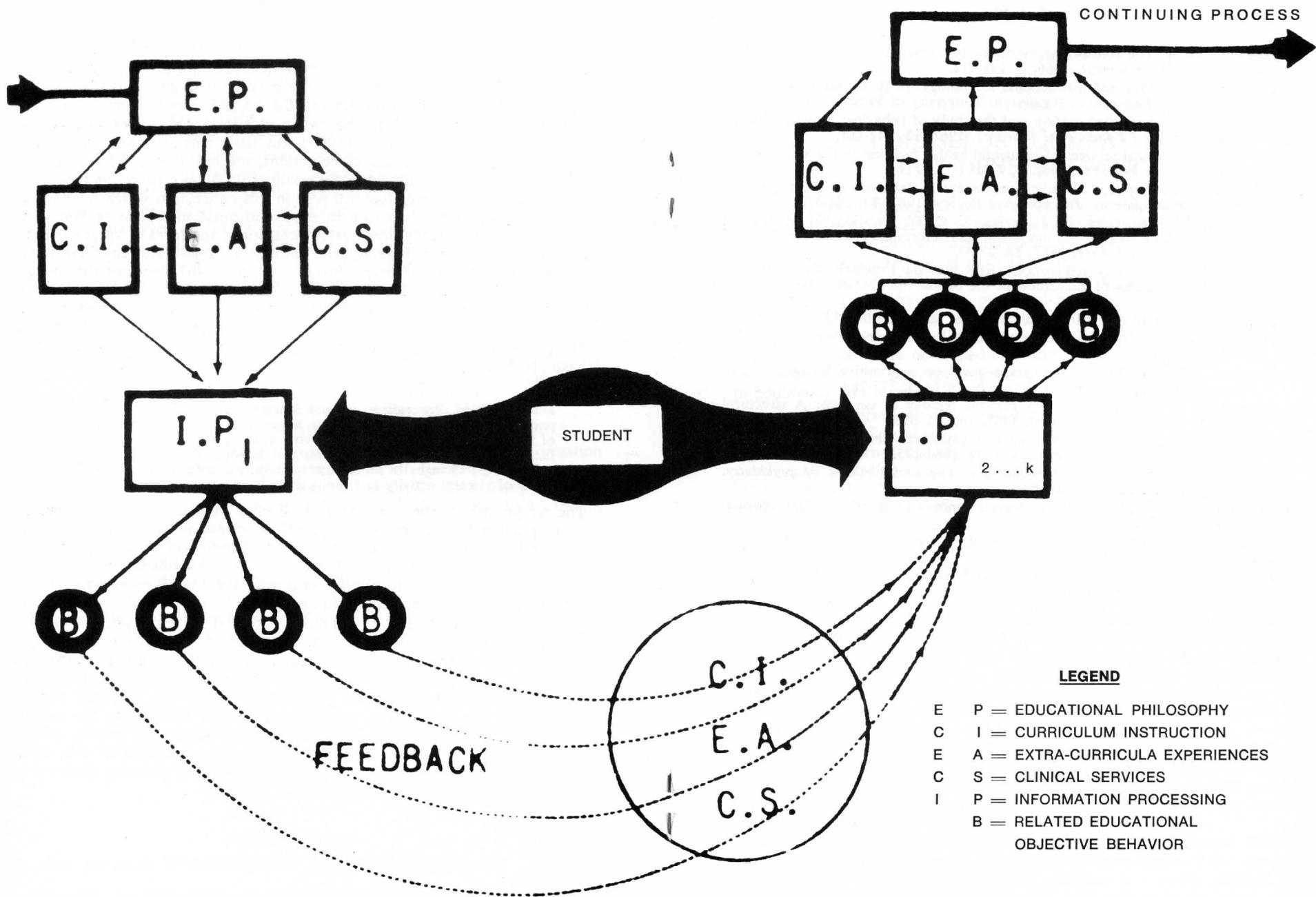
Discrimination, generalization, and learning occur with repeated exposures under different and similar circumstances with different and similar patterns of tonic activity throughout the nervous system. This is well illustrated by the fact that perception, discrimination, and learning depend upon and may be modified by changes in level of activation, patterns of muscle activity, and states of visceral activity and the activity in other sensory systems (p.24).

The relationship of the cognitive and affective domains has been described as inter-actional in nature and reciprocal. Information processing is seen as basic to learning and behavior change. The cognitive-affective directive is in isomorphic relationship to the intellectual and personality or emotional paradigm. It is on this theoretical note that the Cognitive-Affective Interaction model here proposed gains support.

The Cognitive-Affective Interaction Model is an initial attempt to conceptualize the role of clinical services in the total educational and individual student learning process. The operation is a continuous process beginning with educational philosophy that interacts with: curriculum instruction (C. I.), extra-curricular experiences (within the school (E. A.), and clinical services (C. S.). Information processing is seen as learning by the student and is central in the process. From information processing evolves related educational objectives behavior. These behaviors pass through the C.I., E.A., and C.S. functions for interactive communication and planning resulting in modified or new educational philosophy.

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