AN APPROACH FOR THE DESIGN AND IMPLEMENTATION
OF NON-ACADEMIC INTERVENTIONS
WITH LEARNING DISABLED ADOLESCENTS

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ABSTRACT

This paper presents an alternative approach to research in learning disabilities among adolescents and young adults. The author proposes that low achieving adolescents labeled "learning disabled" can and should play a role in research efforts in which they are involved. While much research focuses on educational interventions following basic research formats, research described in this paper would focus on psychosocial concerns within a largely natural or nonartificial context. In addition, the contribution which the LD adolescent can make to the design and implementation of their own treatment program is stressed.
An Approach for the Design and Implementation of Nonacademic Interventions with LD Adolescents

This proposal explores the rationale, efficacy and consequences of an innovative approach to the design of nonacademic interventions with learning disabled adolescents. In essence, it focuses on broadening our concept of special education intervention to encompass the full gamut of life experience independent of school tasks or achievements. A major premise underlying the preparation of this paper is that a disproportionate degree of attention has been devoted to the educational aspects of learning disabilities resulting in a deleterious inattention to alternative areas of intervention research and practice.

Relatively few studies on learning disabled adolescents have been reported over the past ten to fifteen years. Moreover, only a negligible part of such research has been programmatic. Generally, in regard to learning disability research, both the larger number of independent investigations and the smaller body of programmatic research can be dichotomized into the categories of basic and applied studies. The principal commonality overriding this distinction is the tendency for such research to examine those variables which bear with virtual exclusiveness on the manifest academic disabilities. This is not surprising in that contemporary theoreticians, researchers, and practitioners in the field are primarily educators and despite considerable variability in population definition and criteria, school failure is the endemic learning disability trait. This emphasis on the academic or school-relevant perspective is evidenced in the Fall, 1978 issue of the Learning Disability Quarterly. Only one of the eleven articles comprising this special issue on adolescence deals with psychosocial as opposed to learning and/or educational concerns.

Thus, we conduct so called basic research on learning characteristics such as attention, memory, auditory processing, and so forth. Similarly, applied research more frequently bears implications for remediating or circumventing the deficits presumed to produce academic failure. These latter investigations characteristically explore such areas as language traits, school achievement, perceptual abilities, motor skills, and preferences in learning modalities. The major research area producing work transcending the basic and applied distinction are investigations focusing on identification. Here the historic and continuing emphasis is on the behavioral concomitants which themselves are frequently learning variables or otherwise related to school tasks and demands. That is, even the research targeted specifically toward behavioral or psychosocial variables often ultimately translates into academic interventions.
This is not to suggest that research examining or bearing on academic intervention is in any way questionable from a learning disability perspective. In fact, educational remediation and the amelioration of academic inhibitors is appropriately a primary goal for educators serving learning disabled pupils. The concern here relates to the disproportionate investment of professional energy and resources in the academic aspects of the condition with a resulting inattention to alternative problem areas and other potentially remediative interventions.

This position supportive of a broadening in focus of intervention research is particularly salient in regard to adolescents and young adults. Both the maturity and the general intelligence of these individuals must be recognized as highly relevant factors influencing the nature of our interactions whether for research or nonresearch purposes. In contrast, researchers working with and in behalf of young children or the mentally retarded, for example, are by the very nature of their subject populations in fact dealing with relatively passive, pliable and naive individuals. Of course, such passivity facilitates subject compliance and cooperation with research procedures as well as educational interventions. It would rarely, if ever, occur to us to seek subjective feedback or generative input into the design of our research or treatment interventions from these groups. Yet, low achieving adolescents labeled learning disabled can and should play a role in our research efforts if only by reacting to the inferences we draw about them and toward them from our findings. Objective evaluation of our behavior as researchers and practitioners confirms the observation that we tend to neglect the insignificant intellectual and chronological attributes in our professional interactions with the secondary-level and adult learning disabled. In particular, we frequently operate in a patronizing manner treating these individuals as though they were younger and/or less intelligent as a function of their identification as handicapped learners.

Additionally, and to a large degree, we are abetted by the authority inherent in our professional status and positions. That is, for example, we are likely to behave in a manner which maximizes the admittedly real, but not necessarily decisive, distinction between ourselves as "researchers" and the learning disabled individual as "subject". The resulting artificiality and unnecessary formality in communication may appear justified by claims bearing on the need for objectivity and methodological rigor in research design. Certainly, this is the case and supportable for most purposes related to the actual conduct of some research studies. The unconscionable act is the extrapolation of this deficient communication to general interactions which serves to impede the realistic and mutually beneficial exchange of practical as well as heuristic information. The consequence is an inestimable loss to us as researchers and in turn to our subject population who are mature chronologically, bright intellectually, and uniquely perceptive relative to their own in-school and out-of-school experiences as individuals labeled learning disabled.
The continued maintenance of characteristically impersonal research procedures with associated detachment in communication (in the name of objectivity) is at best demeaning when working with young adults who we acknowledge, by definition, as possessing at least normal intelligence. It is pertinent here too that young persons who can, within the context of a school setting, simultaneously acquire the label "learning disabled" and evidence normal or greater intelligence are probably brighter (certainly more adaptive) than their nonhandicapped peers of comparable IQ. The inability to establish effective communication with professional personnel commensurate with their age and intelligence becomes yet another source of school-related frustration.

It is axiomatic to our empirically derived knowledge of behavior that frustration frequently and characteristically leads to a diversity of aggressive reactions. Certainly, it is understandable if not self-evident that schooling is by its very nature an experience fraught with continuous frustration for the learning disabled student. It is only counterproductive to procrastinate on the issue of whether learning problems breed behavioral concomitants or visa versa. Clearly both occur. However, professionals serving the learning disabled should proceed on knowledge-based judgments which compel recognition that antisocial and other maladaptive behavior, indeed, is a common consequent to the frustration of repeated school failure.

Thus, the seeming "overreaction" to a frustrating incident may actually reflect a literal straw breaking a proverbial camel's back. It is reasonable to view the learning disabled adolescent as an individual who is continuously operating under inordinately high frustration conditions as a function of his/her total school experience. The frequently reported low frustration tolerance characteristic of the learning disabled, may more accurately reflect a predictable and situationally defensive if not adaptive response.

In contrast to the passivity of younger and less intelligent children and consistent with this view of learning disabled adolescents, they are indeed likely to be more assertive and generally less cooperative at the secondary level. This noncompliance is perhaps expressed most vividly when they refuse to attend school through either truancy or withdrawal. More common is the in-school acting-out which may lead to informal or formal diagnosis of emotional disturbance. Special educators have long recognized the commonality in symptoms between groups of pupils labeled learning disabled and behaviorally disordered. In fact, some universities and public school settings have combined their service delivery and/or training programs in recognition of the overlap in the nature and presumed needs of at least the mildly handicapped among these two pupil populations.

To some degree, the insensitivity to the intellectual and emotional integrity of learning disabled adolescents is reflected in an emphasis on academic assessment with educational treatments. As we devote greater attention to learning disabilities at the secondary
level, it is becoming increasingly clear that, despite years of highly varied instructional interventions, we do not cure and rarely significantly remediate the conditions. On one hand, this "failure" is itself a strong inducement for continued and expanded research on educational interventions with learning disabled children and youth. Simultaneously, this reality argues for the importance of expanding interventions with and for this population independent of any goals relative to academic remediation. In the absence of remediation success, we are obligated to prepare the adolescent for a reasonably secure and productive future as an adult with learning disabilities.

The foregoing discussion bears implications for research, special education service delivery, personnel preparation, and curriculum development. However, the remainder of the paper will focus on some research implications while endeavoring to evolve a framework in which these implications may be empirically investigated.

This paper does not intend to suggest that researchers in learning disabilities have been entirely remiss in addressing noneducational variables and interventions. In fact, such current research as that being conducted at the University of Kansas Institute for Research in Learning Disabilities includes investigations dealing with such variables as self-esteem, self-perception, social skills, interpersonal (teacher-student) relationships, and occupational skills. For the most part, however, these investigations tend to follow a basic research format in examining the variables and interventions involved in relative isolation from the adolescent's broader psychosocial environment. This may be reflected in a study being specific to school parameters or in the nature of a study itself. Such studies do have merit and are to a degree limited by only the exigencies of good research design. That is, for example, the variable(s) under investigation may have to be examined under relatively artificial experimental conditions or a particular intervention may be studied independent of its larger social context for purposes of controlling potentially extraneous variables.

One particular advantage of an extensive research program such as that afforded by an Institute approach is the opportunity to support some atypically divergent experimentation. This may involve the study of highly speculative hypotheses or the implementation of less traditional research methodology. The preliminary proposal which follows attempts to initiate a potentially more extensive body of research focusing on psychosocial concerns within a largely natural or nonartificial context. Such research requires the relaxation of some principles of research design affording the flexibility prerequisite to practical research within naturalistic contexts. This proposed avenue of research is premised upon a number of assumptions derived from the previous section of this paper:

1. a reasonably thorough and rigorous body of research is evolving on school-related variables and interventions with learning disabled students.
2. insufficient research has been directed on psychosocial variables and interventions with secondary-level and young adult learning disabled.

3. researchers and practitioners tend to underestimate the chronological and intellectual attributes of learning disabled adolescents.

4. the learning disabled adolescent himself/herself may prove resourceful as an active participant in the generative and interpretive aspects of research with this population.

5. school-based frustrations compounded by deficient communication with professionals exacerbate behavioral problems among adolescents with learning disabilities.

6. despite current special educational interventions, the vast majority of learning disabled adolescents complete or withdraw from school to function as learning disabled adults.

7. naturalistic examination of psychosocial variables and interventions with secondary-level adolescents may bear potential for enhancing social-personal adaptation in school and nonschool settings.

Subject Selection

Because this research is largely exploratory, there are no historical precedents or apparent criteria on which to base subject selection decisions. As a cumulative body of data emerges, it should become possible to correlate intervention success with variables characterizing the adolescents involved. For purposes of initiating the investigation, the research rationale and methodology do suggest at least general subject-selection guidelines. Inasmuch as the interventions under investigation will likely have both short- and long-term consequences, subject inclusion should enable both cross-sectional and longitudinal investigations. Thus, it is proposed that for initial development and refinement of research procedures, approximately four adolescents in each of grades 8 through 12 (total of 20) be selected to participate.

In order to restrict between-subject variability and, thus, reduce subject variance to which research results may eventually be attributed, the following constraints appear reasonable: (a) subjects should be identified as learning disabled and diagnosed by the same or comparable criteria; (b) subjects should be in attendance in one school district and preferably within the same school to control environmental confounds such as socioeconomic status or educational philosophies and service models; (c) no subject should simultaneously be participating in a competing experimental program or intervention that clearly interacts with this experience; (d) subjects should be
relatively articulate and opinionated in verbal expression; and (e) subjects should evidence definite, but manageable, behavioral concomitants to school frustration, e.g., hostility, truancy, moderate noncompliance with school routine.

**Phase I - Opening Communication**

A major premise underlying this proposed area of research is the capacity of relatively mature and intelligent learning disabled adolescents to bring their personal experiences and perceptions to bear on the design and implementation of their own treatment program. It is relevant here that PL 94-142 specifies the inclusion of handicapped students in planning their educational program, where feasible, through participation in the IEP process. Certainly, such participation is nowhere more feasible or potentially credible than with the secondary-level learning disabled. Nevertheless, to maximize the value of such participation, the adolescent must communicate in an uninhibited and nonmanipulating manner. Clearly, the establishment of communication channels marked by trust and mutual respect is atypical of pupil-professional relationships and itself a major undertaking. In essence, we are expecting the student to adopt a communication pattern contrary to the pugnacious passivity apparently nurtured and reinforced by teachers and peers. Equally anomalous are the communication patterns implied here for professional personnel who must evidence a willingness and ability to adopt adult interaction patterns within the context of their professional roles with students.

One primary tactic for initiating such communication would focus on a candid dialogue regarding the nature of the research. Specifically, the investigator would engage the subject in a straightforward conversation on the rationale, procedures, and expectations for the research project. In this respect, the individual's status as a learning disabled adolescent, the pertinent knowledge base regarding the condition, and whatever topical direction may be fostered by the student would be fair game for interaction. Certainly, varying degrees of success would be achieved in establishing the intended level and type of interaction, but rigorous documentation of procedures including video-tape recordings will provide a data base for continuously enhancing techniques over time and with a broader range of learning disabled adolescents and young adults. Commensurate with the philosophy underlying the investigation, the purposes, nature, and content of recordings and other data should be accessible to the student.

To the degree that it appears desirable, experimental control should be built into these procedures. For example, to ultimately assess the effects of the "open communication" aspect of this research, independent of other study phases or interventions, a control group might be constituted which receives duplicate experimental handling without the same emphasis on open communication. Rather than reiterate this control option with each recommended procedure, it should suffice to say that this methodological choice may be made at any or all points. However, given the exploratory nature of the research and the existing history of available school experience and records
(for comparison purposes) with these and similar "subjects," such traditional methodological concerns should be minimized. The knowledge gained from these investigations may serve a heuristic purpose in fostering one or more studies utilizing classical methodological procedures.

Phase II - Eliciting Feedback

This phase of the investigation consists primarily of compilation and classification of narrative data from participating students. The nature of these data should relate to the individual's view of those aspects of his/her education which are experienced as either beneficial or detrimental to successful school functioning. The intent would be to encompass all potential facilitative and/or disruptive factors including support conditions in the home, peer relationships, curriculum and instruction, student-teacher relationships, and perceptions of self. To be maximally beneficial and most comprehensive, it is crucial that the communication channels established in Phase I be securely maintained.

The importance of creating classifications of educationally supportive and nonsupportive features lies in the eventual ability to construct a taxonomy of relevant variables. These clusters of interrelated positive and negative school features can then be translated into a variety of intervention approaches. Given a fairly manageable body of specific information about the adolescent and the particular conditions under which s/he operates and/or perceives himself/herself as operating, it is conceivable that a predesigned intervention or combination of interventions with a demonstrated high probability of success can ultimately be selected from an existing and continuously growing pool of interventions.

The utility of the subject selection procedure affording both short-term and long-term participation becomes valuable here. These data will be available from students long experienced (e.g., seniors) as learning disabled students and will enable the elicitation of student views less experienced with the secondary system. Over time, grade level or some correlate (e.g., years receiving special education services or chronological age) may well prove a cogent variable in selecting and/or designing interventions for learning disabled adolescents.

Phase III - Designing Interventions

The number and nature of the interventions to be designed is directly related to the quantity and quality of the data derived in Phase II. Rather than speculate on the design of specific interventions at this point, suffice it to say that they should prove as varied and divergent as the feedback promoting them. Interventions may vary from minimal recommendations on the appropriateness of a particular instructional material to broad psychosocial interventions relative to home conditions.

A team approach appears most suitable to the design of interventions which could unite the skills of researchers with teachers
and curriculum specialists. Broadly, the process should entail the translation of the data generated in Phase II into systematic interventions through the expertise and perspective of team members. Congruent with the philosophy of student involvement advocated throughout this proposal, it would appear desirable and appropriate to include members of the target population in efforts at intervention design. Should student participation in this phase of the research appear to jeopardize the efficacy of intervention implementations, interventions to which one or more students contributed could be researched for evaluation with other students with comparable needs. In general, however, it is anticipated that there be continuous personal student involvement in generating, designing, and intervening in his/her own behalf with involved school personnel serving an open and consistent support role.

Phase IV - Implementing Interventions

The activities undertaken in the previous phases should culminate in a preliminary pool of interventions, at least generally, keyed to the several variables pertinent to their generation, e.g., grade level of student, students' perceptions of impeding conditions, students' perceptions of facilitating circumstances, and so forth. Initially, this phase of the research is primarily directed at the field testing of the interventions. As appropriate and feasible, interventions should be field tested with those students who contributed to their design but should also be tested for generalization with adolescents demonstrating similar needs.

The implementation phase is necessarily ongoing and will likely involve overlap between more lengthy interventions and several short-term interventions. A stratification of the subject sample across grade levels will permit evaluation of intervention consequences at each developmental level. More importantly, this design enables longitudinal research over the sequence of experiences from 8th grade through high school. As always, various control groups may be instituted as needed to provide another type of evaluation of intervention effects.

Phase V - Evaluation and Follow-up

The evaluation component relates first to the ongoing evaluation of specific implementation strategies as described in the previous phase. In addition, the evaluation phase involves the examination of data bearing on the project's overall effectiveness. To a large degree, we should allow our evaluation to come from those adolescents who participated for varying periods of time and to vary degrees in the interventions. The alternative is the specification of presumably objective evaluation criteria which can then be applied in a comparative fashion to participating adolescents as opposed to a matched group of nonparticipants. Both approaches can be employed. However, the artificiality of "matching" a small number of adolescents on several objective variables and then treating them as though they were matched like peapods suggests
that the more anecdotal data may prove more meaningful and instructive for further developing these techniques as well as building and strengthening the pool of available interventions.

The follow-up aspect of this project phase simply relates to the importance of examining the eventual post-school adjustment of the learning disabled adolescent. Here again, both comparative studies of post-school experiences of participating and non-participating students as well as idiosyncratic longitudinal follow-ups may contribute data of value to the refinement of project strategies.