 Avoiding Failure: A Developmental Language Program for Students with Dyslexia-Related Behavior. 

There are several factors that account for the absence of college programs that adequately address students with dyslexia-related behavior, but probably none is more significant than the governmental definition regarding the condition itself. The federal law that provides for the special instruction of dyslexic students explicitly excludes those whose conditions are primarily the result of environmental, cultural, or economic disadvantage. While it has been demonstrated that a minority of these disorders are indeed associated with intrinsic causes such as reversed cerebral asymmetry and other conditions that may be genetically influenced, it is also clear that much of the behavior presently indistinguishable from that of the so-called intrinsic disorders is determined by no demonstrable intrinsic causes and is shaped by extrinsic factors such as inadequate developmental and educational experience. Nothing presently justifies viewing the law's exclusionary provision as actually explaining the causes of this condition, nor should it dictate the educational policy toward it. The characteristic language problems of dyslexic adults are poor decoding and encoding ability. They must be taught basic phonics and word attack skills that were never mastered and that are prerequisites for them to achieve higher levels of literacy. Through a proper program of identification and appropriate instruction, these students can achieve a degree of literacy that would otherwise elude them. (HOD)
The term, dyslexia, describes a heterogeneous group of behaviors which are characterized by inadequate perception and production of the written word. Major factors contributing to this condition are an inability to distinguish certain phonological and graphic elements, a related difficulty establishing correct sound-written symbol correspondence, and faulty sequence processing.

Undiagnosed and untreated, dyslexia is a major cause of failure among community college students. The National Institutes of Health estimate that 15% of the entire U.S. population suffers from dyslexia-related problems. We might expect concentrations of less skilled readers and writers, as are found in developmental language courses, to manifest this condition in even greater numbers.

Work done at Bronx Community College and corroborated by work at Ohio State University indicates that 50% of adult students reading below 8th grade level display marked dyslexia-related behavior. The educational needs of dyslexic adults have largely been ignored.

The fact that they account for a disproportionately large percentage of failures and drop-outs argues strongly for the establishment of programs on the college level to screen for this problem among low-skilled readers and writers and to provide those in need of it the appropriate instruction.
Without such a program, these students come into the colleges only to receive more of the same kind of instruction which left them poor language learners earlier. Many of the developmental language programs may be successful in improving the skills of many of the students enrolled in them, but they are not appropriate for the students whose written language difficulties are dyslexia-related.

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The federal law which provides for the special instruction of dyslexic students explicitly excludes those whose conditions..."are primarily the result of environmental, cultural, or economic disadvantage." The National Joint Committee on Learning Disabilities lends support to this exclusionary provision, declaring that these problems do not result from "...insufficient/inappropriate instruction....; (they) are intrinsic to the individual." While it has been demonstrated that a minority of these disorders are indeed associated with intrinsic causes such as reversed cerebral asymmetry and other conditions which may be genetically influenced, it is also clear that much of the behavior presently indistinguishable from that of the so called intrinsic disorders is determined by no demonstrable intrinsic causes and is shaped by extrinsic factors such as inadequate developmental and educational experience:
The basic fact is that every learning experience involves a modification of a neurological state. The traditional dichotomy between nature and nurture or intrinsic and extrinsic causative factors can no longer obtain in light of our current understanding of the ways in which experience and biology are continually interacting, shaping one another, and redefining the individual's capacity for dealing with the world. Deprivation of experience, particularly at critical developmental junctures, produces neurological anomalies more certainly than some major neurological anomalies produce behavioral deficits.

About 50 years ago a procedure was perfected for performing corneal transplants on patients born with corneal opacity. Scores of teenage and adult patients received the transplants, but they were not subsequently able to see. After the operation they all had the visual equipment of sighted people, but because they did not have the visual experience at earlier developmental stages, they never developed the neuronal wiring necessary for sight. A more recent series of studies in which new born kittens' and monkeys' eyes were sewn shut for the first months of life and then opened confirmed the corneal transplant conclusion. A similar conclusion is indicated by a recent study in which monkeys raised in a black box were found to have 25% fewer Purkinje cells needed for spatial orientation than normally reared controls. Conversely, rats exposed to stimulus enriched environments develop larger cortexes, regardless of age at time of exposure. Experience shapes biology.
The treatment of the intrinsic and extrinsic as discrete categories is unjustifiable; it does not reflect what actually occurs in the real world of development, growth, and education.

A popular model of what may actually occur sees young children with slightly delayed neuro-maturational development receiving instruction for which they are not yet neurologically prepared. By the time they have developed neurologically to be able to receive the initial instruction, they and their class have been promoted and moved on to more advanced work. They are locked into an instructional progression in which they continually receive instruction inappropriate to their maturational level. The likelihood of such children being promoted in the early grades without having learned the fundamentals of written language on which subsequent instruction is based is increased if they appear in other respects to be of average or above average ability. By the third or fourth grade, these children have become problem readers, casualties of the coincidence of a slight maturational delay and inappropriate instructional response. Many of the more tenacious of them make their way into our developmental language classes.

The exclusionary definition of dyslexia is not only descriptively inadequate and misleading, it is discriminatory, because the governmental mandate and meager appropriations based on it exclude those whose disabilities are in large measure the result of inadequate developmental and educational experience, that is, the nation's poor. The social consequences of such a definition are far reaching. There are
millions of students in need of special instruction whose written language difficulties are not demonstrably "intrinsic". The "intrinsic" definition is based on conclusions much too tentative and too problematic to justify withholding appropriate instruction from these students. The National Institutes of Health consider "inadequate teaching methods" first in a discussion of possible causes of dyslexia. By definitional fiat, the exclusionary provision has shifted the burden of responsibility for language learning problems from the social and educational factors shaping the learning experience to the learners themselves. Nothing presently justifies viewing the law's exclusionary provision as actually explaining the causes of this condition, nor should it dictate our educational policy toward it.

Intrinsic and extrinsic are polar categories on a continuum, along which real behavior occurs. You can't teach a chicken Shakespeare, and Shakespeare would probably have clucked had he been educated in a chicken coop, but short of the extreme conditions, intrinsic and extrinsic are mutually shaping and interpenetrating categories. This perhaps helps to explain why the language difficulties clearly associated with intrinsic causes are indistinguishable from those for which no apparent intrinsic cause exists.

The characteristic language problems of dyslexic adults are in large measure those of younger dyslexic students who have not received appropriate remedial instruction. Their most serious limitation is poor decoding and encoding ability,
contributed to by a number of perceptual and processing weaknesses. Students confuse letters that look similar to one another such as p, b, d, g, and q, or m, n, and w. They may write king for kind or then for them. They transpose elements in sequence, writing gril for girl, first for first, reading and writing form for from, per for pre, saw for was, etc. They may simultaneously make visual confusions and transpositions, reading and writing of for to.

They confuse similar phonological elements such as p and b, nk and ng or sh and ch, writing rabid for rapid, think for thing, or mush for much; an, am, and and are particularly troublesome. Students have a lot of difficulty with suffixes and frequently tend to substitute simpler forms for more elaborate forms, because their difficulty decoding prompts them to abandon the effort once they have recognized or made a tentative identification of a root they have in their sight vocabularies. Poor recall and retention, a tendency to omit short words, excessive need for self correction, awkward letter formation, poor spacing of writing on the page, and difficulty grasping logical order and relationships all add to the complex of obstacles to the adult dyslexic's written language competence.

The identification process begins as entering students reading below 9th grade level are given simple tests for auditory and visual acuity and then given a group screening test such as the Adult Level Group Screening Test for Specific Language Disability to help identify those displaying marked dyslexia-related behavior. The process is supplemented by an assessment of each student's oral reading and an initial writing sample. Faculty
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entity. For example, by understanding the grammatical rules and logic of the superlative, students may be better able to recognize and interpret the superlative ending when encountered on the page despite the common tendency to confuse the est and ness endings.

A good deal of attention is devoted to strengthening students' segmental perception and discrimination.

Students must develop thorough awareness of the semantic structures in which written information is presented. Reading and writing assignments must familiarize them with these structures and give students ample experience using them. The more the students understand the form, the more able they are to deal with the substance, to make sense out of what was previously chaos, to read and write better.

A word should be said about the counseling needs of these students. They come with a long history of failure, low tolerance of frustration, and r -literate or marginal language skills. They need considerable counseling.

Finally, our successes with these students have been encouraging. They are educable. Through a program of identification and appropriate instruction they can achieve a degree of literacy which would otherwise elude them.

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