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Reduced Recidivism and Increased Employment Opportunity Through Research-Based Reading Instruction



Office of Juvenile Justice and Delinquency Prevention

141324

Reduced Recidivism and Increased Employment Opportunity Through Research-Based Reading Instruction

by

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National Institute of Justice Office of Justice Programs U.S. Department of Justice

Distributed by

Office of Juvenile Justice and Delinquency Prevention Juvenile Justice Clearinghouse

> 633 Indiana Avenue NW. Washington, DC 20531

> > January 1993 NCJ 141324

U.S. Department of Juztice National Institute of Justice

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Supported under award #90–IJ–CX–0042 from the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice. Points of view in this document are those of the author and do not necessarily represent the official position of the U.S. Department of Justice.

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ACQUISITIONS

ABSTRACT

Reviews of the research literature provide ample evidence of the link between academic failure and delinquency. It can also be shown this link is welded to reading failure. It is proposed that research-based reading instruction can be used to reduce recidivism and increase employment opportunity for incarcerated juvenile offenders.

A re-examination of the research literature and interviews with reading instructors teaching juvenile offenders in correctional institutions in five states, was undertaken to determine: 1) if, in fact, it is sustained frustration, rather than academic failure per se, that leads to delinquency; 2) the extent reading failure is the cause of this frustration, not learning disabilities per se and/or marginal intelligence; 3) what critical obstacles prevent all educationally at-risk students from learning to read accurately and fluently and write legibly and grammatically what they can talk about and aurally understand; and 4) what steps must be taken to supplant current instructional practices with methods that can be validated by experimental research in order to prevent reading failure as well as help disabled readers become competent readers.

The research revealed: 1) reading failure is most likely a cause, not just a correlate, for the frustration that can and does result in delinquent behavior; 2) an inordinately high percentage of wards are unable to decipher accurately and fluently and write legibly and grammatically what they can talk about and aurally comprehend; 3) a high percentage of wards are diagnosed learning disabled with no evidence to indicate any neurological abnormalities; 4) handicapped readers are not receiving the type of instruction recommended by experimental research; 5) reading teachers, as a result of preservice reading methods courses, have been denied a working knowledge of the reading programs and methods of instruction that are most successful in preventing reading failure as well as meeting the needs of handicapped readers.

In order to remove the barriers to improved reading instruction so as to allow handicapped readers to become proficient readers in the shortest time possible, it will be necessary to provide reading teachers with the opportunity to acquire a knowledge of the alphabetic principles governing English spelling as well as becoming confident in using instructional programs that incorporate intensive, systematic phonics methods. For this to be accomplished, this inservice training most likely will have to come from private sector literacy providers because departments, schools and colleges of education have a poor track record in providing this type of instruction.

REDUCED RECIDIVISM AND INCREASED EMPLOYMENT OPPORTUNITY THROUGH RESEARCH-BASED READING INSTRUCTION

I

INTRODUCTION

Reducing recidivism and increasing employment opportunities for incarcerated juvenile offenders is a worthy goal, not only in lessening what has become an increasing tax burden for incarcerating juvenile offenders, but also, more importantly, in reducing crimes against persons and property and contributing to the development of productive citizens. Mounting evidence mandates that this goal be given the highest priority: In 1975, the Congressional Subcommittee to Investigate Juvenile Delinquency reported that recidivism was between 60-84% for juvenile offenders.¹ Nationally it is estimated that in 1988 it costs \$29,600 to confine a delinquent in a juvenile correctional facility, with the per annum average costs for individual States at that time ranging from \$17,600 to more than \$78,800.² Today, approximately \$1.67

¹Subcommittee to Investigate Juvenile Delinquency, <u>Our Nation's</u> <u>Schools -- A Report Card: "A" in School Violence and Vandalism</u>. Washington, D.C.: U.S. Government Printing Office, 1975.

²Barbara Allen-Hagen, "Children in Custody 1989," <u>Juvenile</u> <u>Justice Bulletin</u>, January, 1991. Washington, F.C.: Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice. p.2.

billion is being spent for operating all State and local government facilities, up 14% from 2 years ago.³

If a recidivism rate is a barometer that measures the success of correctional institutions in reducing crimina. activity, the data as of 1989 are predicting stormy weather: The percentage of rearrests within 12 months was between 54-74%; for reconviction within 12 months, between 43-54%; and for those reincarcerated within 36 months, between 25-62%.⁴ Even more alarming, by February, 1989:

public juvenile facilities held 56,123 juveniles. This was a 5-percent increase over the 1987 count and a 14percent increase over 1985. This higher number of juveniles confined, coupled with a decline in the juvenile population, means that a greater proportion of the juvenile population was held in custody. In 1989, 221 juveniles per 100,000 were in custody, compared to 185 per 100,000 in 1985."⁵

If recidivism is to be substantially reduced, then obviously the first step is to reduce the actual number of recidivists, i.e., reduce the number of incarcerated delinquents. Secondly, if the rate of recidivism is to be reduced, juvenile offenders upon release from a correctional institution must be able to compete favorably for jobs. For this to occur, there must be a match in terms of the knowledge and skills juvenile offenders have and what employers want. For this match to take place, juvenile offenders must acquire at least a minimum level of academic achievement

³Ibid., p. 2.

⁴Barry Krisberg, et al., <u>Unlocking Juvenile Corrections:</u> <u>Evaluating the Massachusetts Department of Youth Services</u>. San Francisco, CA.: National Council on Crime and Delinquency, 1989. pp. 29-31.

⁵Barbara Allen-Hagen, op. cit., p. 2.

which, in turn, depends upon the ability to read and write. Not being able to read and write increasingly puts those seeking employment at extreme risk in as much as the job market is more and more demanding applicants to demonstrate intellectual ability which, it will be shown, relates significantly to reading. As Dr. Barry Asmus, Senior Economist with the National Center for Policy Analysis, notes:

Work and workers are changing. Forty years ago, seventy percent of the labor force was engaged in manual work. Today, seventy percent work mostly with their minds, not their hands. In an era of "human capital," physical assets are less important than intellectual ones.⁶

Those who do not have the ability to read cannot enter a job market that has some promise of economic opportunity. They are locked out, not because they do not want to enter, but because they do not have the key. They are not literate.⁷

Tragically, far too many educationally at-risk students and juvenile offenders do not have this ability. According to Citicorp Savings Bank of Illinois, it "rejects 840 of every 1000 applicants

⁶Asmus, Barry, "Building an Unlimited Future," <u>Imprimus</u>, vol. 21, no. 1, January, 1992. MI: Hillsdale, College. p. 4

⁷Literacy, as defined here, is distinguished from some predetermined level of education. To read or write means to decode or encode accurately, fluently and effortlessly one's own vocabulary. Literacy, so defined, provides the means by which further knowledge and skills can be acquired through informal and formal education and measured, if so desired, in terms of a percentile, standard score or grade level. for entry-level teller and clerical positions [because] applicants can't seem to complete the application forms."⁸

Leaders from business and industry emphatically state that far too many students, be they juvenile offenders or not, have not acquired basic reading and writing skills. The Honorable A. Polly Williams, State Representative from Wisconsin, provides an insight as to the extent of the "too many." Speaking only about Milwaukee, she says:

Sixty percent of all Milwaukee ninth graders do not complete high school, and of the 40 percent who stay in the school and walk across the stage to receive their diplomas, only 10 percent can read. For what amounts to a 90 percent failure rate, we pay \$600 million a year to support the Milwaukee public schools.⁹⁻

One need only multiply Milwaukee by Los Angeles, San Francisco, Phoenix, Dallas, Houston, Chicago, and New York City -- just to name a few -- to get a picture of the scope of the problem.

David Kearns, former Chief Executive Officer of Xerox Corp. and now Under Secretary of Education, maintains that American businesses will hire more than a million new employees who can't read, write or compute, with "three out of four major corporations already...giving new workers basic reading, writing, and arithmetic courses."¹⁰ John F. Akers, chairman of IBM Corporation and the

⁸Carl Salser and Fred West, <u>The Decline and Fall of American</u> <u>Education and a Blueprint for Its Resurrection</u>. Portland, OR: Halcyon House, 1991. p. 125.

⁹A. Polly Williams, "Inner City Kids: Why Choice Is Their Only Hope," <u>Imprimus</u>, vol. 21, no. 3, March, 1992. MI: Hillsdale College. p. 2.

¹⁰Salser, op. cit., p. 124.

Business Roundtable Education Task Force comes to a similar conclusion, noting that "each school day, some 4,000 young Americans drop out of school; that one American corporation spends from \$200 to \$2000 to bring its stateside employees up to technical proficiency; while in its Japanese plant, it spends, on the average, \$1 per employee."¹¹

On average, incarcerated juvenile offenders are severely crippled readers, making the match between what these youngsters want and what employers need difficult to bring about: Project READ, a national program to improve reading skills of juveniles in training schools throughout the country, found this to be true after assessing 2,670 juvenile offenders. Their 1978 annual report indicated that the average student tested was 15 years, 6 months of age at the time of testing and in the ninth grade, but read at only a fourth grade level. "Thirty-eight percent of all students scored below fourth grade."¹² Business and industry is willing to provide training, but it can't train young men and women, regardless of how eager they are, if they cannot even decode without effort their own vocabularies.

These depressing statistics can be changed as one research project proved in Orange County, California. It convincingly demonstrated that reading programs for juvenile offenders can accomplish three important things: With 50 or more hours of direct

¹¹Salser, op. cit., p. 124.

¹²<u>To Make a Difference</u>, a report by Project READ. Silver Spring, MD: READ, Inc., 1978. p. 27.

instruction significant reading gains can be achieved. Recidivism can be reduced by 20% or more; and remedial instruction is cost effective.¹³

The research indicates that poor reading ability results to a large extent from inappropriate reading instruction. A review of the research literature as well as interviews with reading instructors teaching juvenile offenders in ten correctional institutions in five states, was undertaken to determine: 1) if, in fact, reading failure is a causal factor, not just a correlational factor, contributing to delinquency; 2) what critical obstacles inhibit improved instructional practices; and 3) what steps must be taken to supplant current instructional practices with methods that can be validated by experimental research.

¹³The Juvenile Justice Literacy Project (1989) in California provided reading instruction for incarcerated juvenile delinquents in two settings. Both groups were screened for developmental reading disorder (DSM III-R criteria). Criteria were the same for the treatment and comparison group (fully English proficient, hearing and vision within normal limits, freedom from neurological impairment, verbal or performance IQ at or above 80, a discrepancy between reading and verbal performance IQ of 15 points or more, a history of regular elementary school attendance). The treatment group (N=32) received 90 minutes of remedial reading per day using a operationally defined multisensory Orton Gillingham approach (intensive, systematic phonics instruction). The treatment group received an average of 52 hours of reading instruction in small groups of 4 to 6 students. A comparison group received an average of 47 hours of reading instruction in the regular program. The County Sheriff's Central Crime Index was used to determine the number of contacts participants had with the juvenile justice system within one year of their release. Every dollar invested in reading saved \$1.75 as a result of reduced recidivism.

DELINQUENCY'S ESSENTIAL INGREDIENT

II

The link between academic failure and delinquency is strong.¹⁴ "There is a disproportionate involvement in delinquency by those youth failing in school. Schools are apparently contributing to the delinquency problem by continuing to provide traditional programming, though it has failed repeatedly."¹⁵ This traditional programming includes reading instruction that leaves many students, after six years of instruction, unable to read accurately, fluently and effortlessly with comprehension. This link is strong because the only avenue to academic success is by being able to read and comprehend textbook material. One response for students who cannot do this is frustration.

As to cause and effect, the research has been ambivalent over the years regarding the connection between delinquency and reading failure. As one review of the literature put it, "it is not known...whether the aggression predated the reading problems or the aggression was a response to the frustration of trying to read with out success."¹⁶ The most current research findings, however, are not ambivalent:

¹⁴J. L. Rincker, et al., "Academic and Intellectual Characteristics of Adolescent Juvenile Offenders," <u>Journal of Correctional</u> <u>Education</u>. vol. 41, no. 3, September, 1990.

¹⁵Ibid., p. 126.

¹⁶R. R. Ross, "Reading Disability and Crime: In Search of a Link," <u>Crime And/Et Justice</u>. May, 1977. p. 17.

"Low reading levels tend to predict the likelihood of the onset of serious delinquency. Longitudinally, poor reading achievement and delinquency appear to mutually influence each other. Prior reading level predicted later subsequent delinquency...[moreover] poor reading achievement increased the chances of serious delinquency persisting over time."¹⁷

Theory

What brings about the delinquency is not the academic failure per se, but sustained frustration which results from continued failure to achieve selected academic goals. When frustration can find no resolution into constructive or productive activity, one response, although not necessarily the only one, is aggressive, anti-social behavior. Other responses, which are equally counterproductive academically, are regression, resignation and other maladaptive behaviors that result in fixated responses.¹⁸ These reactions to frustration are not only possible but predictable. They have been well documented from clinical research conducted both with animals and humans.¹⁹

¹⁸Regression and resignation involve retreat and surrender respectively from a specific learning activity necessary for achieving a selected academic goal. A maladaptive fixation is one in which the student continually responds, not only inappropriately but also irrationally, in spite of extensive remedial instruction.

¹⁹Raymond E. Laurita, "Frustration and Reading Problems," <u>Bulletin of the Orton Society</u>. 27:1972.

¹⁷David Huizinga, et al., <u>Program of Research on the Causes and</u> <u>Correlates of Delinquency; Urban Delinquency and Substance Abuse</u>. Sponsored by the Office of Juvenile Justice and Delinquency Prevention. Washington, D.C.: U.S. Department of Justice, 1991. Chapter 18, p. 17.

As early as the turn of this century, I. P. Pavlov, while studying conditioned reflex response, clinically demonstrated that frustration can cause anti-social aggression: In one experiment, a dog was trained to respond to a picture of a circle, as opposed to an ellipse. When shown the circle, he would get food -- the ellipse, no food. In short time, if given no food, but shown the picture of the circle, he would salivate (conditioned reflex). As the ellipse was continually changed over time to look more like a circle, the dog continued to make the correct salivary response until the differential between the circle and ellipse was 8 to 7.

When the relationship was further reduced to a 9 to 8 differential, difficulty was encountered. The dog is reported to have "broken down." After three weeks of continual deterioration, the animal eventually lost control ... and its behavior underwent marked behavioral change .. he squealed, barked and bit at the harness ... Pavlov termed the dog's deviant behavior "experimental neurosis."²⁰

Pavlov discovered that humans were not immune to sustained frustration either: In a similar experiment, he demonstrated that they could also be made to "break down" under similar conditions, with one response being anti-social aggression. He conducted an experiment in which he trained a child to distinguish between two different metronome beats, 144 and 92 beats per minute respectively. When the second metronome beat was gradually increased to the point of 120 beats, the child became disinterested in the experiment. When the slower metronome beat was further increased to 132, "it is reported that the child 'broke down.' He became excited,

²⁰Raymond E. Laurita. <u>Reading Writing and Creativity</u>. Seattle, WA: Bernie Straub Pub. and Child Pub., 1973. p. 34. disobedient [displaying anti-social aggression], closed his eyes and even went to sleep."²¹ On reporting on Pavlov's laboratory work, Laurita points out:

It is clear then that there is a point at which even the most well trained subject will begin to break down and engage in maladaptive behavior not suited to the achievement of goals; in the dog's case by barking, biting and squealing, and in the boy, by disobedience, hyperactivity and even sleep.²²

The anti-social aggression that Pavlov was able to create in the laboratory is also being created in tens of thousands of classrooms across our nation as a result of schools of education providing reading pedagogy based upon theories of teaching and learning that cannot be validated by experimental research.

All the ingredients necessary to create this anti-social aggression through sustained frustration are present: There is an unachievable goal, in this case academic achievement. It is unachievable because the means of achieving it, the ability to read and comprehend text material, is, in many cases, absent due to whole-word reading instruction. Though the means of achieving the goal are absent, the student, nevertheless, is continually pressured to achieve it by teachers, parents and peers. As a result, frustration ensues. Finally, the student not only has no alternative for achieving the goal, but he is not allowed to leave the failure-producing environment as a result of compulsory attendance laws. For those who learn to read, they cannot grasp the magni-

²¹Ibid., p. 35. ²²Ibid., p. 35. tude of resentment and hostility that is generated over time by such unrelenting frustration from which there is no escape. For many, this frustration explodes into delinquency, or worse yet, violent forms of anti-social aggression.

How ironic it is that compulsory attendance laws were designed to ensure that every child would have an opportunity to become literate, but instead, the professors of reading pedagogy have turned public schools into unwitting tools for promoting illiteracy. Because meaningful employment opportunity goes hand in hand with literacy, tragically for many, economic independence will not become a reality. It may not be compulsory education that is the culprit so much as compulsory attendance without appropriate reading instruction. As one review of the research on educating delinquents stated:

...compulsory school attendance law... 'facilitates delinquency by forcing youth to remain in what is sometimes a frustrating situation in which they are stigmatized as failures'.... The longer learning-disabled students stay in school, the more likely they are to become involved with the police.²³

An investigation of delinquency in California, Colorado, Connecticut, Texas and Virginia conducted by the General Accounting Office consultants confirms this research:

In our society, school is the only major legitimate activity for children between the ages of 6 and 18. If a child fails in school, generally there is little else in which he can be successful.... Delinquency and misbehavior become a way for the failing child to express his frustration at those who disapprove of his academic underachievement. This disapproval comes not only from

²³E. E. Gagne, "Educating Delinquents: A Review of Research," Journal of Special Education. 2:1977. p. 13. parents and teachers, but also from other children who are keenly aware of school status based on performance.²⁴

In this same investigation, interviews with correctional officials revealed that such a youth "1) has usually experienced several years of failure in schools, 2) is frustrated by the apparent inability to learn, and 3) is plagued by feelings of inadequacy and lowered self-confidence. In other words, the child is 'turned off' academically."²⁵ As a result, one aggressive response is delin-quency.

If students do not have the ability to read accurately, fluently, and effortlessly, then academic achievement is not likely. Ability to acquire knowledge of the core curriculum -literature, mathematics, science, and social studies -- is going to be difficult, if not impossible.

Research

Significant research has been conducted that investigates reading failure as the major source of frustration that leads to delinquency, based upon three hypotheses:²⁶

1) Continued failure in the most significant educational task challenging the child (reading) is a deeply frustrating experience when permitted to continue for several years, [especially] when such failure begins prior to the

²⁵Ibid., p. 18.

²⁶Dennis Hogenson, "Reading Failure and Juvenile Delinquency," <u>Bulletin of The Orton Society</u>. 24:1974. p. 165.

²⁴Learning Disabilities: The Link To Delinquency Should be <u>Determined, But Schools Should Do More Now</u>. Report to the Congress, by the Comptroller General of the United States. Washington, D.C.: Departments of Justice and Health, Education, and Welfare, 1977. p. 3.

child's developing ability to think rationally (approximately age seven and one-half).

2) Continued frustration over prolonged periods of time will result in aggressive behavior directed outward toward society (delinquency) or inward toward the self (neurosis).

3) Confined delinquent boys who have failed in reading will have behavioral histories showing more anti-social aggression than confined delinquent boys who were able to read.

In investigating two groups of incarcerated delinquents, 48 in each group, in two different states, a significant correlation between reading underachievement and aggression for both groups was found. Though IQ scores correlated with reading success in both groups, it will be shown shortly that IQ scores are not reliable predictors for determining if one will be able to learn to read, rather the ability to read will to some extent determine IQ scores. But this study is remarkable in what it <u>didn't</u> find:

... the present study was <u>unsuccessful</u> in attempting to correlate aggression with age, family size, or number of parents present in the home, rural versus urban environment, socio-economic status, minority group membership, religious preference, etc. <u>Only</u> reading failure was found to correlate with aggression in both populations of delinquent boys. It is possible that reading failure is the single most significant factor in those forms of delinquency which can be described as anti-socially aggressive. I am speaking of assault, arson, sadistic acts directed against peers and siblings, major vandalism, etc.²⁷

The author of this research, though quite aware that correlation cannot imply causation, still holds that "one is still faced with

²⁷Ibid., p. 167.

the sticky problem of explaining a relationship that could not be expected to occur by chance alone."²⁸

Sufficient evidence from experimental research indicates that sustained frustration not only can **cause** aggressive anti-social behavior, but that in a school setting, reading failure meets all the requirements for bringing about and maintaining the frustration level that frequently leads to delinquency.

The late Dr. Hilde Mosse, who specialized in child and adolescent psychiatry and served over 22 years "in the trenches" as school psychiatrist for the New York Bureau of Child Guidance and the Board of Education, came to the following conclusions from having diagnosed children with reading disorders for over two decades:

The causative chain starts with the fact that the child is not taught reading properly and that his reading disorder is not corrected early enough. Such a child may feel that he is stupid and that he will never be able to achieve anything worthwhile in life, and in this way slide into delinquent behavior. The **reading disorder comes first** [emphasis mine] and is the major cause of such a child's violent or otherwise delinquent behavior.²⁹

²⁸Ibid., p. 164.

²⁹Hilde L. Mosse, M.D., <u>The Complete Handbook of Children's</u> <u>Reading Disorders</u>. 1st pub. in 2 vols. New York: Human Sciences Pr., 1982. Reprinted paperback ed.: Riggs Institute Pr. p. 284-85.

TEACHER MISEDUCATION

III

The normal inclination is to hold teachers accountable for students failing to learn to read: The student hasn't learned; therefore, the teacher hasn't taught. Not so. Teachers teach the way they were taught to teach. And once employed, they are held accountable for using the reading programs purchased by the district. To do otherwise is considered insubordination.

Teachers cannot and should not be held accountable for what is squarely the fault of the reading departments in schools of education which have failed, and continue to fail, to instruct prospective teachers in the phonology of the English language as well as in intensive systematic phonics methods that incorporate direct instruction strategies -- an approach to reading instruction, it will be shown, that has a proven track record of success compared to over approaches. Most teachers, even if they were favorably disposed toward some type of phonics instruction, most likely would shy way from experimenting with it, because they have little or no knowledge of phonetics or intensive, systematic phonics programs that are based upon this knowledge. The schools of education have, for the most part, withheld this knowledge from teachers. An examination of college catalogs, textbooks on developmental reading, and course outlines for reading methods courses provides the incontrovertible evidence that this is true.

Ever since the late 1920s, the professors of reading have been supportive of one form or another of whole-word instruction, many

believing this instruction makes learning easier and more rewarding.³⁰ The tragic side effect of this deleterious instruction has been countless millions of illiterates and functional illiterates.

Whole-word instruction, like car models, undergoes periodic name changes: In the 1960s it was called "language experience"; in the 1970s, "psycho-linguistics"; and a decade later "wholelanguage"³¹ -- all fueled by the same eclectic method, with some variation, of course, in each program. Whole-language advocates, of course, vehemently deny this. But if the professional journals can be believed, whole-language advocates recommend that students can learn to read in the same way they learned to talk, that students should be taught to identify words by sight as wholes, that they should guess at written words, using context cues, and that there are otherwise normal children who cannot learn phonics and must be taught by a purely visual approach.³² When disabled readers cannot comprehend what they are reading because they are struggling with decoding words, whole-language advocates in the main bypass the phonics component of reading instruction, tending

³⁰Marilyn J. Adams, <u>Beginning to Read</u> (Summary) op. cit., p. 4-5.

³¹A succinct, accurate and research-based account on the wholelanguage movement written in layman's language is provided in three issues (3/1989; 2//1991; and 6/1991) of <u>The Blumenfeld Education</u> <u>Letter</u> pub. by Paradigm, Boise, ID. For a scholarly analysis of the whole-language method, consult <u>The Missing Parts of Whole</u> <u>Language</u>, by Dr. Steve Truch (Calgary, Alberta, Canada: Foothills Educational Materials, 1991) Distributed by INTRAC, San Luis Obispo, CA

³²Patrick Groff, "Teachers' Opinions of the Whole Language Approach to Reading Instruction," <u>Annals of Dyslexia</u>, 41:1991. p. 83-95. instead to "ignore it, deny it, or trivialize it," as the Director of the Reading Foundation in Canada observed.³³

Any form of intensive, systematic phonics instruction is forbidden in the whole-language catechism. Its apostles preach, occasionally, something they call "phonics"; however, it is the type of phonics instruction that does not ever allow the student to acquire mastery of the letter/sound associations. Without this mastery of the phonetic elements of English spelling, students constantly resort to guessing, using context clues and applying consonant substitution strategies -- the latter an inefficient way at best to read unknown one-syllable words and a useless approach for polysyllabic words. Resort to phonics when necessary say some advocates of whole-language instruction, but it is never made clear when it is necessary.

It is precisely this type of incidental "phonics" that gives true, systematic phonic instruction a "bad rap." There is no support from the experimental research for the pseudo-phonics instruction that is alluded to by the whole-language advocates. As a result of their tenacity in holding to theories of instruction which cannot be validated by experimental research, the vast majority of reading teachers come away from their preservice education courses not only not knowing anything about intensive, systematic phonics but also believing, with almost religious fervor, that they "may produce readers who are not proficient

³³Steve Truch, <u>The Missing Parts of Whole Language</u>. Calgary, Alberta, Canada: Foothills Educational Materials, 1991. p. 114.

either at identifying words or at getting meaning,"³⁴ if they use phonics instruction.

In spite of the evidence from experimental research in support of intensive, systematic phonics and direct instruction, why is it, then, do so many of the professors of reading pedagogy continually reject this type of instruction for methods based upon wholelanguage theory for which there is no support from experimental research? If one subscribes to the notion that **belief** drives instruction, not necessarily the evidence of experimental research, then as Dr. Jeanne Chall has said, "we must consider more powerful forces at work -- values, ideologies, philosophies, and appealing rhetoric."³⁵

As far as reading instruction is concerned, these forces have translated into what might be called the thalidomide of reading instruction: It removes what some would call the discomfort of strenuous teaching but gives birth to severely handicapped students. As Dr. Chall describes it:

Whole language...seems to say that a good heart goes along way, and the less teaching, the better teaching. It fears rote learning more than no learning...These views attract many teachers to whole language ...It is a romantic view of learning. It is imbued with love and hope. But, sadly, it has proven to be less effective than a developmental view, and least effective for those who tend to be at risk for learning to read -- low-

³⁴Patrick Groff, <u>Preventing Reading Failure, an Examination of</u> <u>the Myths of Reading Instruction</u>. Portland, OR: National Book Co., 1987. p. 4.

³⁵Jeanne S. Chall, "American Reading Instruction: Science, Art, and Ideology, <u>All Language and the Creation of Literacy</u>. Baltimore, MD: The Orton Dyslexia Society, 1991. p. 24. income, minority children and those at risk for learning disability.³⁶

Professorial Ignorance

The salient reasons why the professors of reading are opposed to intensive, systematic phonics methods are many and have been investigated.³⁷ One stands out above all others: The professors themselves are ignorant about phonetics and real phonics methods. It is not to be expected that they would advocate that which they are ignorant about.

Dr. Sterl Artley, himself a very highly respected academic among professors of reading, let the public know in 1961 what his colleagues had kept a closely guarded secret for over two decades:

For a generation the teaching of word-attack skills was almost a lost art... educators, in their anxiety to modify the false emphasis of the past, openly challenged the necessity of any word-attack skills at all -- in particular, phonetics. Reading instruction in general gradually deteriorated at this **vital point** (emphasis mine).³⁸

Evidence surfaced 15 years later that indicated clearly to what extent phonics instruction had become a lost art. Based upon one study of 222 professors of reading, 61.7% holding a Ph.D. or Ed.D. degree, it was determined that:

...college professors who teach teachers to teach reading do not agree on what reading terms should be taught,

³⁶Ibid., p. 25.

³⁷Patrick Groff, op. cit., Chapter 13.

³⁸Sterl A. Artley., Foreword. In William S. Gray, <u>On Their Own</u> <u>in Reading</u>. Cited in Mitford Mathew, <u>Teaching to Read</u>; Chicago: University of Chicago Press, 1966. their definitions, or on the generalizations to be used in phonic analysis...the evidence also indicates that only a small percentage of the sample had a satisfac-tory knowledge of those decoding elements he deems it important for teachers to know, that gross misinformation characterizes his instruction to teachers, that contradictory information is supplied teachers, and that college professors, as reflected in this sample, are generally poorly instructed about or meagerly conversant as a result of self-study with those elements which are basic to reading instruction.³⁹

What became a lost art around 1940, has not been found, much less restored. Ten years ago, Dr. Richard Venezky made the following points based upon his investigation of basal (or beginning) reading programs used in our public schools:

The first thing you will discover is approximately 80-90 percent of the children in the United States today are taught with programs that are not instructional programs for reading...If you should analyze closely, as I have recently, the four major basals that were available at the end of the 1970s, you will discover that never once in the decoding program do they ever get to the point of applying decoding...never once is the child even encouraged to sound out a word. Guessing from context still remains the basis of what is called phonics in the basal programs of America.⁴⁰

From this it is obvious the professors on whom the publishing houses rely for advice in developing reading programs were not at all influenced by experimental research findings. It appears they prefer to remain willfully ignorant about this research.

³⁹Albert J. Mazurkiewicz, "What the Professor Doesn't Know about Phonics Can Hurt!" <u>Reading World</u>. December, 1975. p. 85-6.

⁴⁰Richard Venezky, "A History of Phonics in American Reading Instruction," Conference Report. <u>The Reading Informer</u>, 9, Tacoma, WA: The Reading Reform Foundation, 1981.

Institutionalization of Failure

A decade later, the leadership of the International Reading Association (IRA) and the National Council of Teachers of English (NCTE), the two professional associations representing reading and language arts teachers respectively, continues to support antiphonics methods of instruction that have failed so many students. The only difference now is they want to jettison the basal reading programs, which for the most part remain indifferent to systematic phonics instruction, and instead return to a greater dependency on the sight-word approach to word recognition. Such an approach can only lead to increased reading failure.⁴¹

There is little indication to date that the IRA and the NCTE are in any way willing to acknowledge what the research literature has revealed about the importance of intensive, systematic phonics instruction in preventing reading failure and advancing literacy. For at least the last decade, a review of national conference topics and professional journal articles written from these two associations indicates they are unalterably committed to those "more powerful forces at work" which drive whole-language instruction, in spite of the fact no controlled studies of experimental research can be shown to validate it.

⁴¹I phoned Dr. Venezky on August 12, 1991, to ascertain if he thought whole-language instruction would improve beginning reading or make it worse. Without hesitation, he said it would make it worse. He was of the opinion that were reading teachers to uncritically embrace whole-language methodology, we would really have a nation of illiterates!

The evidence from both sides of the Atlantic suggests wholelanguage instruction is a means of advancing illiteracy rather than literacy: From Maine, one gets a preview of coming attractions. Based upon the Maine Educational Assessment, fourth graders in Rockport Elementary School, after three years of whole-language instruction, had a reading score of 215. The state average was 250, with a comparison band of 250-305.⁴² The track record in Bromley, England was so bad for this teaching method that the school board would "no longer honor course work taken by its teachers in the whole language approach, ...nor hire new teachers so trained."⁴³

What remains a mystery is why the research findings over time have made no impact on the decision-makers who determine how reading will be taught. Though it is certainly understandable that the professors of reading instruction are not going to be enthusiastic about admitting their ignorance publicly, apparently they are not even willing to admit to themselves that they have been wrong theoretically, even in light of the last 30 years of empirical evidence based upon experimental research. It is incomprehensible that this situation is allowed to continue, because, based upon the most extensive synthesis of research findings, "we have no strong success to report for a language-oriented program," such as whole-

⁴²Camden Herald (Maine) of June 8, 1989.

⁴³C. Weaver and P. Groff, <u>Two Reactions to the Report Card on</u> <u>Basal Readers</u>. Bloomington, IN: ERIC Clearinghouse on Reading and Communication Skills, 1989. p. 44. language, according to the nationally recognized research scholar, Dr. Lauren Resnick.⁴⁴

What is ironic is that educators who say they care so much about children and quality education continue, as they have, to ignore the scientific research on reading instruction. The result of this professorial ignorance is predictable. It greatly handicaps reading teachers, leaving them without the means of best serving at-risk students. It is professionally unethical, verging on criminal neglect, to assign teachers instructional tasks while knowingly denying them the knowledge and skills necessary to accomplish these tasks. But this is precisely what professors of reading pedagogy continue to do when they instruct their students about methods of instruction based upon theories that deny the very nature, structure and logic of our English spelling system. As a result, preservice reading courses leave teachers at best suspicious, and at worst, hostile, of any language arts or reading program that includes intensive, systematic phonics instruction.

Because professors of reading refuse to abandon their commitment to speculative theories about reading instruction, reading teachers inadvertently victimize their students with less effective, if not ineffective, reading instruction. Professorial ignorance translates into dedicated teachers being denied the tools to do the kind of job they want to do -- the best job.

⁴⁴Lauren B. Resnick, <u>Theory and Practice in Beginning Reading</u> <u>Instruction</u>. Pennsylvania: Learning Research and Development Center, University of Pittsburgh, 1977. p. 13.

The author of the above study on professors of reading conducted an investigation of what reading teachers know about phonics methods. The findings were predictable:

...the conclusions that teachers have an inadequate knowledge of terms used in reading and a low level of ability to apply them to words typically found in reading materials seem evident. Moreover, the conclusion that teachers exhibit a low level of phonic knowledge as this was measured by the phonic competency examination is warrantable and, more than 10 years later, confirms findings of other studies which used more restricted measures...Weaknesses not only include a lack of knowledge of the consonant and vowel letters, but also the vowel and consonant sounds, phonics knowledge as reflected in generalizations, phoneme-grapheme correspondences and graphemic options for phonemes.⁴⁵

Does this lack of knowledge have any effect on whether or not students learn to read? Most assuredly it does. Going back to the data provided by Project READ, it was found that 38 percent of all 2,670 students read below the fourth grade level. These students were then given the consonants, consonant blends, and rhyming word sections of the Botel Phonics Inventory. The results provided incontrovertible evidence that decoding accurately and fluently was the problem:

Consonants -- Of a possible 18 consonants, the average student knew 15. The range was from 0 to 18.

Consonant Blends -- Of a possible 19 blends, the average student knew 10. The range was from 0 to 19.

Rhyming Words -- Of a possible 8 correct answers, the average student knew 6. The range was from 0 to 8.46 47

⁴⁵Albert J. Mazurkiewicz, "What Do Teachers Know about Phonics," <u>Reading World</u>. March, 1975. p. 176-77.

⁴⁶ <u>To Make a Difference</u>, op. cit., p. 27.

The authors of the Project READ report conclude from their data on the 907 students scoring below fourth grade in reading comprehension that "as phonics ability increases, reading level increases."⁴⁸ But disabled readers cannot increase their knowledge of phonics, hence, improve their ability to read, when their teachers are ignorant themselves about phonics instruction. As the data above make clear, incarcerated juvenile offenders who are disabled readers or non-readers, i.e., they cannot read at all, will not be able to read a great deal better than a fourth grade level unless they can decode accurately, fluently and effortlessly. This will only come about if the alphabetic code (letter/sound associations and the principles governing their use) are taught explicitly, intensively and systematically.

Ideological Bias vs. Academic Achievement

Not only are prospective reading and language arts teachers severely limited as a result of what they are not taught, but in addition, there is some indication they are further handicapped by accepting face value what their professors tell them about what constitutes good practice in general and about reading methods in

⁴⁸Ibid., p. 28.

⁴⁷ The findings leads one to believe these students have an adequate knowledge of vowel sounds. Matching six pairs of words that rhyme, some of which they may already be able to recognize, is hardly an accurate assessment of a knowledge of vowel sounds or a knowledge of the speech sounds represented by the 70 common phonograms (individual letters and letter teams) used to spell most English words.

particular. According to one investigation of teacher education, it was found that schools of education do not consider academic achievement a very high priority. Based upon classroom observations and interviews with students, faculty and administrators in a year-long investigative pilgrimage of 15 representative colleges or schools of education across the country, it was discovered that teacher education had little to do with advancing literacy. Shockingly, it was found instead that:

... the goal of schooling is not considered to be instructional, let alone intellectual, but **political** [emphasis mine]. The aim is not to produce individuals capable of effort and mastery, but to make sure everyone gets a passing grade. The school is to be remade into a republic of feelings -- as distinct from a republic of learning --where everyone can feel he deserves an <u>A</u>.

In order to create a more just society, future teachers are being told, they must focus on the handicapped of all kinds -- those who have the greatest difficulties in learning, whether because of physical problems or emotional ones, congenital conditions or those caused by lack of stimulation in the family or lack of structure in the home -- in order to have everyone come out equal in the end. What matters is not to teach any particular subject or skill, not to preserve past accomplishments or stimulate future achievements, but to give to all that stamp of approval that will make them "feel good about themselves."

Thus the education of teachers has not only been politicized; it has been reoriented toward what is euphemistically called "special education."49

This dramatic shift of emphasis away from mastery and proficiency in reading, writing and numeracy to mental health (psychobehavioral) issues, which are tenaciously supported by behavioral

⁴⁹Rita Kramer, <u>Ed School Follies; the Miseducation of America's</u> <u>Teachers</u>. N.Y.: Free Press, 1991. p. 209-10. extremists within the community of social scientists, has been extensively researched.⁵⁰ This shift of emphasis has adversely affected education, leaving particularly educationally at-risk students ill prepared to become economically independent. In light of this research, perhaps it is not a mystery after all why the professors of reading pedagogy continually reject the research findings, and instead, prefer to keep teachers ignorant of the means of truly advancing literacy.

Academic Illiteracy

Students in preservice education courses, as well as graduate students, cannot, and should not, be faulted for not questioning their professors. They are viewed as the authorities, holding, as they do, advanced degrees, and for the most of them, this means a doctorate. One assumes this degree implies a high level of literacy as well as being erudite in at least one academic discipline. Unfortunately, this appears not to be true. Though there are unquestionably some fine scholars in the field of education, a doctorate in education does not necessarily warrant the "Good Housekeeping" seal of approval when it comes to getting correct and useful information from some of them.

Robert Cole, former editor of the very prestigious education journal, <u>Phi Delta Kappan</u>, recounts getting letters from Ph.D. recipients containing "errors of spelling, grammar, and syntax that

⁵⁰B. K. Eakman, <u>Educating for the 'New World Order'</u>. Portland, OR: Halcyon House, 1991.

would make my 11th-grade English teacher blush."⁵¹ If, in fact, some professors of education are only marginally literate, then there is every reason to question their professional competence. As Cole comments:

Some people who can't even spell the word "dissertation" have written one and had it accepted by what could only be a committee of smug, self-deluded ignoramuses. How dare people who teeter on the brink of functional illiteracy pass themselves off as doctors of <u>anything</u> -- let alone of education? And how dare an institution of so-called higher learning award these illiterates a seal of approval and foist them on an already skeptical public? No one is served in such pretentious dens of ignorance -- least of all the students who will look to these newly minted "doctors" for instruction and guidance.⁵²

Practicing and future teachers must be aware that, in Cole's words, "somewhere out there are professors perpetuating their own ignorance by drilling it into their students."⁵³ It would be particularly naive to assume all professors of reading pedagogy are immune from this scathing indictment.

Since these professors are not held responsible for the countless students who fail to learn, extreme caution should be exercised in accepting uncritically what they say. In light of Cole's revelation, parents, teachers, politicians, and particularly decision and policy-makers responsible for curricular decisions would be well advised to base their decisions on the empirical

⁵¹Robert W. Cole, "Doctored to Death," <u>Phi Delta Kappan</u>, November, 1985, p. 178.

⁵²Ibid.

⁵³Ibid.

evidence of replicated, experimental research -- not on speculative theories that have not been proven to advance learning.

As depressing as Cole's assessment of the professors of education is, he is not the only one sensing the inadequacies of these "scholars." As early as 1963, over 2,000 graduates of education were interviewed, and it was found these teachers "revealed that their college preparation in reading had been seriously deficient."⁵⁴ Approximately two decades later, reading instruction had not improved. According to one of the most thorough reviews and synthesis of the research on reading instruction, it was found teachers "get only a fleeting introduction to the knowledge required for teaching reading," including the "phonology of English, which provides the foundation for the teaching of phonics."⁵⁵ According to one researcher of teacher education. "there is evidence that universities are structurally and philosophically incapable of providing the kind of training that practicing teachers and school administrators need."56 It still remains for departments, schools and colleges of education to prove these critics wrong.

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⁵⁴M. S. Austin and C. Morrison, <u>The First R: The Harvard Report</u> on <u>Reading in Elementary Schools</u>. NY: Macmillan, 1963. p. 361.

⁵⁵R. C. Anderson, et al., <u>Becoming a Nation of Readers: The</u> <u>Report of the Commission on Reading</u>. Washing, D.C.: U. S. Department of Education, 1985. p. 106.

⁵⁶W. Corbin, "Universities Should Get Out of the Business of Teaching Teachers," <u>Teacher Educator</u>. 20:25.

THE CONSEQUENCES OF MISEDUCATION

When, juvenile offenders who average 15 years, 6 months are reading at the fourth grade level,⁵⁷ the fault, in part, must lie with the educational environment and nature of the reading instruction. It cannot be assumed that low intelligence or mental, physiological or psychological deficits are totally responsible. As Dr. Mosse observed:

When a disorder affects so many people, one calls it an epidemic. An epidemic is always caused by external forces, not by defects in the individual. This applies to psychologic disorders as much as to physical diseases. When so many children are affected by the same disorder, the explanation cannot possibly be individual psychopathology. Adverse social forces must be investigated as the common cause.⁵⁸

In the medical community and among educators, the disorder is called dyslexia, indicating those who failed to learn to read with traditional methods⁵⁹. Many medical doctors and educators would deny that social factors are basically responsible for reading failure. They contend that the source of the problem is basically neurological, but the very fact so many juvenile and adult nonreaders, who are labeled dyslexic, become readers when provided with intensive, systematic phonics instruction, makes it very difficult

⁵⁷<u>To Make a Difference</u>, op. cit., p. 27.

⁵⁸Hilde L. Mosse, op. cit., p. 261-62.

⁵⁹According to <u>Webster's New Ninth Collegiate Dictionary</u>, c1990, dyslexia means a "disturbance in the ability to read." In the medical profession and among educators, the term implies a disturbance that severely inhibits the acquisition of reading skills by individuals who have normal or high intelligence.

to accept this position. Samual L. Blumenfeld, who labels dyslexia the "disease you get in school," comes much closer to the truth:

The difference between a dyslexic and a functional illiterate is purely social. Dyslexics are usually adolescents from middle-class or professional families whose parents assume that their child's reading difficulty is more of a medical or psychological problem than an educational one.

A functional illiterate is simply someone who has kept his reading problem to himself and goes through life pretending he can read... He assumes he's dumb, not sick or mentally disturbed.⁶⁰

Children, if "taught reading properly," should after six years of schooling be able to read accurately and fluently and write legibly and grammatically using their own vocabulary. Statistics on incarcerated juvenile offenders strongly suggest reading has not been, and is not being, taught properly. An examination of selected programs at correctional institutions indicated methods were used for teaching word recognition that cannot be supported by experimental research. Students were classified learning disabled without evidence from testing that specified the nature of the disabilities.

Testing conducted at diagnostic and evaluation centers most frequently provided reading teachers no indication of specific reading deficits that must be addressed. Grade level scores for reading comprehension were given without any indication at what level oral comprehension was achieved. In interviewing reading

⁶⁰S. L. Blumenfeld, "Dyslexia: The Disease You Get in School," <u>The Blumenfeld Newsletter</u> (Boise, ID: Paradigm Books). vol. 3, no. 1, January, 1988. p. 1

teachers, it was determined they had, as a result of inappropriate preservice reading methods courses, little or no knowledge of instructional methods that employed intensive, systematic phonics teaching.

Methodology

For students to be taught properly means they understand the alphabetic principles governing the translation of speech into print and vice versa -- that written words represent a sequence of individual letters and/or letter teams that, in turn, represent the sequence of speech sounds in words. For most students, particularly those who have learning difficulties or who are not highly motivated, they must be taught explicitly these alphabetic principles. If they are not, they will have difficulty learning not only to read, but also to spell and write.⁶¹

Good readers are able to identify sounds in isolation, blend individual speech sounds into words, and segment monosyllabic words into speech sounds. Poor readers have extreme difficulty doing this or cannot do it at all.⁶² For those who cannot read accurately, fluently and effortlessly, good reading instruction must

⁶¹Marilyn J. Adams, <u>Beginning to Read: Thinking and Learning</u> <u>about Print</u>. Cambridge, MA: MIT Press, 1990. Chapter 4.

⁶²I. Y. Liberman, et al., "Linguistic Abilities and Spelling Proficiency in Kindergartners and Adult Poor Spellers," in J. Kavanagh and D. Gray (Eds.), <u>Biobehavioral Measures of Dyslexia</u>. Parkton, MD: York Press, 1985.

include training in phonemic awareness and processing⁶³ and teaching of the alphabetic code through direct instruction with sufficient practice to enable readers to decode effortlessly, i.e., at an automatic level of response. Replicated experimental research unequivocally requires it.⁶⁴

Though Dr. Lauren Resnick stated, as a result of her thorough analysis of the research literature, that "we need to include systematic code-oriented instruction in the primary grades, no matter what else is also done,"⁶⁵ it is charged by some that intensive, systematic phonics instruction is not effective with older students, that it should not be used. Dr. Jeanne Chall, Director of Harvard's Reading Laboratory and a member of the Commission on Reading that authored <u>Becoming a Nation of Readers</u>, rebuts this charge:

It may be necessary to extend instruction in phonics for those who need it. The point of phonics is to help kids break the code. They arrive at school with **substantial speaking and listening vocabularies** [emphasis mine];

⁶³Phonemic awareness is the ability to identify phonemes (discrete, identifiable speech sounds) within syllabic units. Equally important for learning to read and write is the ability to process phonemes (sequence them) from left to right from the spoken or written syllable or word. The ability to do this is not dependent upon a knowledge of the letters that represent them. The ability to identify and process phonemes does not come naturally to approximately one-third of the population; however, it can readily be acquired through training.

⁶⁴Patrick Groff, <u>Preventing Reading Failure; an Examination of</u> <u>the Myths of Reading Instruction</u>. Portland, OR: Educational Research Associates, 1987. Chapter 1.

⁵⁵Lauren B. Resnick, op. cit., p. 14.

phonics helps them make the connection between what they already know and the symbols they see on the page.⁶⁶

Unfortunately intensive, systematic phonics instruction is not what disabled readers are getting. These readers include many incarcerated juvenile offenders, ages 13 to 17, who read like beginning primary grade students and manifest the following characteristics:

Serious problems in phonics. More often, they have good mastery of consonants but little or no mastery of vowels.

Difficulty discriminating among words like <u>the</u>, <u>that</u>, <u>this</u>, <u>those</u>, <u>them</u>; and <u>was</u>, <u>were</u>, <u>with</u>, <u>which</u>, etc.

Difficulty with words ending in <u>s</u>, <u>ed</u>, <u>and</u> <u>ing</u>, although they know the root words. Difficulty reading from context. Many correctional non-readers tend to guess at what a sentence means. They often guess at the meaning of a word rather than to read the individual words in the sentence.⁶⁷

Instructional practices

Most teachers, when teaching these disabled readers, use what is frequently labeled an eclectic approach, because they believe students learn differently and have different learning styles. They adamantly believe there is no single "best" approach for teaching accurate and fluent decoding of written material, such as

⁶⁶William J. Bennett, <u>First Lessons</u>. Washington, D.C.: U.S. Department of Education, 1986. p. 22-23.

⁶⁷John Hostert and T. Hisama, "Characteristics of Non-Readers in a Correctional Setting and Strategies for Teaching Reading," <u>Journal of Correctional Education</u>. vol. 35, no. 1, March, 1984. p. 13. intensive systematic phonics. The irony of this situation is that the eclectic approach is in fact a single method, comprised of mutually contradictory strategies, none of which can be supported by experimental research. The late Dr. Charles Walcutt, author of <u>Teaching Reading</u> (1974), succinctly describes the inadequacies of the eclectic method as:

... a battery of behavioral objectives that are mutually contradictory and that reflect conflicting ideas about the nature of reading. If a child looks at a picture to guess the idea of an unfamiliar word, he is responding as if the printed word were a symbol of a meaning, whereas in fact it is a symbol of a sound. If he studies the context in order to deduce the meaning, he probably is not going to look at the letters and try to identify the sound presented by them, for the two approaches depend on such different ideas of what reading is that they will not be natural responses for the same child. If the child has been taught to look at a word as a shape or configuration, he will not look at it from left to right as a sequence of sounds. If he looks at parts of words, he may see father as fat plus her -- and there is certainly no future in this for him. When we seek to equip a child to "attack" a new word with this entire battery of clues and concepts, we are throwing him into a state of total confusion unless perchance he picks out the one right method and forgets the others as some children will occasionally do.68

Since 1955, between 80 and 90 percent of our nation's school districts have been using this eclectic approach in spite of the fact that experimental research literature does not support it.⁶⁹

It was found in interviewing reading teachers in correctional institutions that most of them used an eclectic approach, which

⁶⁸Charles Walcutt, "Sounding Out, No! Phonics Yes!" <u>Learning</u>, 5:1976. p. 76.

⁶⁹Illiteracy in America; Extent, Causes, and Suggested <u>Solution</u>. Washington, D.C.: The National Advisory Council on Adult Education, 1986. p. 23-24.

meant they did believe phonics had a role to play in reading instruction -- though for some of them a very minor role. But when queried about how they taught phonics, it was found that it was used in an incidental way. Intensive, systematic phonics was not taught; rather <u>phonetic clues</u> were taught, such as initial consonant sounds so that the student, with the help of context clues, might guess the correct word.

For most reading teachers, decoding words still remains a guessing game. From 70 years of experimental research, such an approach to phonics has been shown to have little, if any, value in developing accurate and fluent readers, particularly for educationally at-risk students. Because most reading teachers still strongly believe, as a result of preservice education and training, that this eclectic approach is the best way to teach decoding, it is not hard to see why it is far easier to fault the student rather than the method when learning does not take place -- that is, it is far easier to diagnose and label students learning disabled.

Learning disabilities (LD): How real?

No one will deny that there are organic and/or psychogenic handicaps that make learning to read not only difficult but also affect reading achievement. Perceptual handicaps, brain injury, minimal brain dysfunction, aphasia, memory disorders, mental disorders etc., are all very real, but are they responsible for the

high incidence of reading failure that affects children in school or incarcerated juvenile offenders?

The research literature provides no evidence to permit an affirmative response, nor do interviews with staff at diagnostic and evaluation centers serving juvenile offenders show that these children suffer from some neurological abnormality. A wide range of tests are administered at these centers, supposedly to determine intelligence and to assess academic and language levels of competence. Of course, none of these tests are designed to determine neurological abnormalities. However, if some children score particularly low on an IQ test, usually the WISC-R, the decision is made that these children are learning disabled, implying, based upon normed scores, that these children are in some way neurologically and/or cognitively impaired.

All that these tests appear to measure is acquired linguistic ability. The key word is "acquired." If children have come from a home environment that places little value on education in general and reading in particular, and if, in addition, these children reside in a social and cultural environment that not only reinforces the same parental values but also provides little opportunity or incentive to develop a vocabulary that transcends the corner drugstore, it is reasonable to assume the world of language and thought is going to be limited. To say as much is not to say these students cannot learn to read and write what they can talk about and understand, and in many cases go on to learn what is needed to make employment opportunity an open, rather than a closed, door.

Moreover, to label these students learning disabled is to do absolutely nothing constructive for them. For teachers, it only provides an invalid reason why they are not learning. It conveniently faults the students rather than the method of instruction.

PUBLIC LAW 94-142

Investigative research from the field suggests many students may be classified inappropriately as learning disabled for reasons having little to do with learning handicaps.⁷⁰ Of equal importance there is disturbing evidence from one statewide study that indicates these students are receiving essentially the same instruction as students in Federally funded ECIA, Chapter 1 remedial programs.⁷¹ This being the case, one cannot help but question in many cases the validity of this diagnosis.

It appears "learning disabilities" may have more do with increasing staff than addressing cognitive deficits or neurological abnormalities. For example, throughout the 1970s public school enrollments were declining, but at the same time school districts found ways to hire more teachers, administrators, paraprofessionals and aids. This was done as a result of PL 94-142, which funded Special Education.

⁷⁰Lori Granger, <u>The Magic Feather; the Truth about Special</u> <u>Education</u>. N.Y.: Dutton, 1986. Chapter 10.

⁷¹Legislative Budget Committee, <u>K-12 Learning Disabilities</u>. State of Washington, 1990. pp. 9-10. than 4 million of our children...we had fewer kids in school in those sixteen years -- but more of them were suddenly in Special Education programs, which required more teachers, more support staff, new school buildings, new busing contracts, special supplies."

Where had all these sick children come from? The biggest single chunk of them came under the heading of "learningdisabled," a pseudo-disease that had not even existed in 1970...the push was on by experts in the education field to up the figures even more dramatically -- one suggested up to 30 percent of our kids were victims of LD and ought to be segregated in part or full-time special programs.⁷³

These figures strongly suggest, regardless of the fact that there are children who do need supplemental instruction to meet special needs, that economic motives may be influencing who gets assigned to Special Education classes. To a point, the more students that can be labeled "LD" the more money there is available to the district and the school.

This program also appears to be a dumping ground for minorities: More black children are in Special Education programs than white children. While black children comprise 16 percent of the school population, 40 percent are in classes for so-called educable mentally retarded children. "The teachers accept the figures but say it is not racism on their part, nor is it the fault of the tests; it is just a thing they would rather not talk about."⁷⁴ This response should not go unchallenged.

The percentage of incarcerated delinquents who are classified as learning disabled is also inordinately high:

⁷³Lori Granger, op. cit., p. 53.
 ⁷⁴Ibid., p. 58.

90 percent of the adjudicated delinquents tested in a study conducted by the State of Colorado's Division of Youth Services were diagnosed as having learning problems.

70 percent of the delinquent youths tested in a Rhode Island study were found to have measurable disabilities.

57 percent of the youths referred to the Norfolk, Virginia, Youth and Family Clinic by the juvenile court were found to have general learning disabilities.⁷⁵

These high percentages suggest that correctional institutions, like public schools, might have motives, other than educational ones, for classifying wards LD.

The evidence is mounting. John Ray, an attorney, has represented 20 to 25 children who were classified LD or "emotionally disabled (EH)" by school districts. He maintains that "by joining mandated funds with the natural inclination of bureaucrats to swell their domains, the state has unwittingly spawned a system increasingly willing to stock its classes with children who don't belong in them."⁷⁶ One cannot help but wonder if the axiom -- What a government subsidizes, it gets -- is not also applicable to correctional institutions in terms of classifying students LD. The Federal government makes the money available. The public schools and correctional institutions simply select the "appropriate" tests and determine the cut-off scores they need in order to get the money. What could be easier? What is particularly bad, is that

⁷⁵Legislative Budget Committee, op. cit., p. 15.

⁷⁶John Fahnley, "Empire Builders Victimize Children," New York: <u>LI NEWS</u>, April 3, 1989. p. 1. the tests used to determine who is learning disabled are inappropriate.

Inappropriate Tests

An IQ test does not reveal what **specific** deficits contribute to the reading disability. Moreover, with few exceptions, neither do academic achievement tests and language tests. What they tend to provide in many cases are achievement level scores given in terms of standard scores, percentiles or grade levels. This information is helpful in determining grade-level placement, but very little value when trying to determine the cause and extent of reading deficits.

The on-site visits to diagnostic and evaluation centers revealed that most of the testing had little relevance to the reading teachers in the correctional institutions who are faced with the immediate task of addressing specific reading deficits. The testing did not provide the reading teachers with the information they needed to help handicapped readers to become proficient readers.

The Legislative Budget Committee of the State of Washington, in conducting a statewide investigation of services provided LD students, confirmed these testing practices:

> Goals in the student's individualized education program (IEP) are often standardized statements and are not based on assessment data. The assessment classifies the student in a particular handicap category (such as LD) for state funding purposes. But the label has little diagnostic and instructional programming value. Little conclu-

sive information is available on LD student outcomes and program effectiveness.⁷⁷

Such testing can only lead to a mismatch between instruction and student needs which will do nothing to reduce student frustration. To the contrary, it most likely will only aggravate it, increasing the possibility of continued anti-social behavior. This might well explain why, in part, the number of delinquents, as well as the rate of recidivism, has not declined, but rather is increasing.

A criterion frequently used to classify an incarcerated delinquent as learning disabled is an IQ test. The reason for doing this is based upon two assumptions about such tests, both erroneous: 1) that they measure intelligence, and 2) that less intelligent delinquents, as determined by an IQ test will have a difficult time learning to read. Dr. Marilyn Adams, a cognitive psychologist who has just completed a definitive study of reading instruction, emphatically rejects these two assumptions based upon research findings:

...what we mean by mental age or intelligence in virtually all such studies is how well an individual performs on standard IQ tests. This has remained true despite our own protestations and objections, and despite the accruing evidence that IQ tests do not measure intelligence but only a weak correlate thereof.⁷⁸ Whereas IQ and general cognitive skills seem not to have much bearing on early reading achievement, early reading failures seem to result in a **progressive diminution** [emphasis mine] in IQ scores and general cognitive skills.⁷⁹

⁷⁷Legislative Budget Committee, op. cit., p. iv-v.
⁷⁸Marilyn J. Adams, op. cit., p. 57.
⁷⁹Ibid., p. 59.

Programmed Retardation

Keith Stanovich explains most forcefully the extraordinary implications of the relationship of reading failure to the progressive diminution of intelligence:

Slow reading acquisition has cognitive, behavioral, and motivational consequences that slow the development of other cognitive skills and inhibit performance on many academic tasks. In short, as reading develops, other cognitive processes linked to it track the level of reading skill. Knowledge bases that are in reciprocal relationships with reading are also inhibited from further development. The longer this developmental sequence is allowed to continue, the more generalized the deficits will become, seeping into more and more areas of cognition and behavior. Or to put it more simply --and sadly -- in the words of a tearful nine-year-old, already falling frustratingly behind his peers in reading progress, "Reading affects everything you do."⁸⁰

Simply put, the student who is not taught to read is inevitably destined for programmed retardation. Such a statement is not hyperbole or inflamed rhetoric. Students who cannot decode, or do so poorly, have depressed I.Q. scores. Once taught to decode, using intensive, systematic phonics, intelligence increases. As Mona McNee states in her manual for teaching children to read, "the experts will in time be proved doubly wrong, not that low I.Q. stops a child learning, but that not learning to read prevents the normal development of I.Q.!"⁸¹ This instructor provides some

⁸⁰K. E. Stanovich, "Matthew Effects in Reading: Some Consequences of Individual Differences in the Acquisition of Literacy, <u>Reading Research Quarterly</u>. 21:1986. p. 390.

⁸¹Mona McNee, <u>Step by Step; a Day-by-day Programme of Inten-</u> <u>sive, Systematic Phonics, for All Ages</u>. Pub. by Mona McNee, East Dereham, Norfolk, England, 1991. p. 111. preliminary evidence that supports the theory that the inability to read interferes with cognitive development.⁸²

- Boy age 6.2*, could not read, I.Q. 97. 10 months later, age 7.0 but with Reading Age 9.0, his I.Q had risen to 118, and a year later had gone up another 9 points: Total rise 30 points.
- Boy age 7.6, could not read, I.Q. 82, 9 months later had a reading age of 7.8 and I.Q. had risen 24 points.
- Boy age 8.8, R.A. 6.9, I.Q. 108; 8 months later, C.A. 9.4, R.A. 9.0, I.Q. rise of 22 points.
- Girl age 5.8, could not read, I.Q. 92. 19 months later, C.A. 7.4, R.A. 9.6, I.Q. Rise 50 points.

*C.A. = Chronological age

The evidence is meager indeed which shows that classifying a student LD and applying traditional reading methods will turn a handicapped reader into a competent one. Neither should low I.Q. scores be given as a valid reason for why delinquents are not learning to decode accurately, fluently and effortlessly.

It should be noted that some researchers question the premises underlying the concept of learning disabilities, particularly the "presumed neurological basis of the disability,"⁸³ since it cannot be shown, except in rare cases, that "children identified as LD have been diagnosed as having neurological impairments or information processing problems."⁸⁴ These researchers believe that "the

⁸²Ibid., p. 115.

⁸³Gerald Coles, <u>The Learning Mystique: A Critical Look at</u> <u>"Learning Disabilities</u>" (New York: Pantheon, 1987) and Kenneth A. Kavale and Steven R. Forness, <u>The Science of Learning Disabilities</u> (San Diego: College Hill Press, 1985).

⁸⁴Legislative Budget Committee, op. cit., p. 5.

learning problem may not reside in the child but can be traced to inadequate instructional methods and to other environmental factors,"⁸⁵ -- what Dr. Mosse labeled "sociogenic factors." The fact that students labeled LD <u>do</u> learn to read, if taught with intensive systematic phonics methods and direct instruction, strongly suggests that placing students in special education programs that differ little from standardized classroom instruction will hardly prove beneficial.

- Gallegos Elementary School in Tucson, Arizona, corroborates this fact.⁸⁶ In 1986 it had an enrollment of 623 students -- 52% were Hispanic children, 2% black Americans, and 4% native Americans or Asian-American children. There were low socio-economic parents and many one-parent families and unemployed parents. Quite a few parents were on welfare. Not infrequently both parents worked.

What is significant is 46% of the intermediate students, all of whom had transferred to Gallegos, had been in Special Education, most classified learning disabled. One year later, only **four** students remained in Special Education.

The miraculous cure for learning disabilities was not hard to find. In spite of many adverse sociogenic factors, what distinguished Gallegos Elementary School was the fact that it was the <u>only</u> school in the district using Romalda Spalding's unique language arts program, <u>The Writing Road to Reading</u> which incorpo-

⁸⁵Ibid., p. 5.

18.

⁸⁶Mary Musgrave, "The Story of Gallego Elementary" (Speech), <u>Annual Conference Report</u>, vol. 15, no. 1, July, 1987. Tacoma, WA: Reading Reform Foundation. p. 31-32 +. rates phonemic awareness and processing training and a highly structured multi-sensory approach for teaching the letter/sound associations and and how they function through direct instruction. The teachers at this school proved learning disabilities may well be an obese concept bloated with the rationalizations of those professors who cannot admit that it is their instructional methods - that they promote which are at fault, not necessarily the children, when reading failure occurs.

V

THE TEACHING METHOD: A CRITICAL FACTOR

The teaching method is the only critical factor that will be considered here. Unquestionably, parents, peer groups, and the social and cultural environment also impact significantly on a student's <u>desire</u> to learn to read, and once able to read, to become a life-long reader. But because teachers have little, if any, control over the sociogenic factors outside the classroom, only the nature of instruction will be considered: What students must learn in order to decode accurately, fluently and effortlessly is precisely what teachers must know if the author's meaning is to be understood.⁸⁷ Dr. Hugh Schoephoerster, former Right to Read

⁸⁷Whole-language advocates deny that meaning resides in the text. Rather, it must be constructed in the readers's mind. True enough, but what must be constructed is the author's meaning which is derived from the text, not the reader's skewed interpretation resulting from inaccurate decoding. The author's meaning can be constructed by virtue of the fact that the author and reader share a common vocabulary which is tied to similar or identical concepts. Though reading comprehension is confined to one's actual and vicarious experiences, it is the latter experiences which increase

Director in Minnesota, has been credited with stating it quite succinctly:

Unless we can decode we will never understand, as we won't have anything to understand. The student must know about letter sounds. He must have phonics before he can successfully decode.

For children who are non-readers or disabled readers, the most comprehensive review of the research literature and analysis of it to date shows "the approaches that included **both** systematic phonics **and** considerable emphasis on connected reading and meaning surpassed the basal-alone approaches on virtually all outcome measures."⁸⁸ When studying the reading deficits of adults, Liberman and Shankweiler found in their comprehensive review of the literature that an "awareness of the phonological constituents of words... is most germane to the acquisition of literacy."⁸⁹ These two researchers did not find cognitive deficits responsible for reading failure but rather deficits relating to phonology; i.e., students lacking the ability to make use of a knowledge of letter/ sound associations and the phonetic principles governing them. Though it has been determined that adult disabled readers suffer

through reading, thus increasing (within the cognitive limitations of the reader) the scope and depth of comprehension.

⁸⁸Marilyn J. Adams, <u>Beginning to Read: Thinking and Learning</u> <u>about Print</u>: A summary prepared by Steven A. Stahl, et al. Urbana-Champaign: University of Illinois, 1990. p. 9.

⁸⁹I. Y. Liberman and D. Shankweiler, "Phonology and the Problems of Learning to Read and Write," <u>Remedial and Special</u> <u>Education</u>. 6:1985. p. 10.

essentially the same deficits as do children,⁹⁰ unfortunately little has been done to test the effectiveness of the same methods of instruction that have proven effective with children to see if they are equally effective with juveniles⁹¹ and adults.

<u>Evidence</u>

Two different reading programs, however, both incorporating phonemic awareness and intensive systematic phonics instruction, serving two different clientele, strongly support the notion that the intensive systematic phonics instruction that has proven effective with children is indeed equally effective with older students. Neither in any way reflected the typical basal reading program that advocates of intensive, systematic phonics methods find so ineffective.

Sing, Spell, Read and Write, though designed for primary age children, has been used effectively with adult prison inmates:

Prisoners in the Norfolk, VA, city jail were instructed with the SSRW program for one hour a day for six weeks. The result of the instruction was an increase in their reading ability of at least two grade levels. The

Suffolk, VA, Sheriff's Department reports that 16% of the students (inmates) learned to read in three months using

⁹⁰B. Byme and J. Ledez, "Phonological Awareness in Reading Disabled Adults," <u>Australian Journal of Psychology</u>. 35:1983. p. 185-197.

⁹¹The term, juvenile, is defined by state statute; and therefore, definitions vary according to jurisdiction. In most states, it applies to individuals that are 17 years of age or younger; however, in a few states, the upper age limit is 16.

Sing, Spell, Read and Write compared to 3.5% using other programs over a period of eleven years.⁹²

Besides the phonics component, SSRW makes extensive use of both writing and connected reading, not word reading.

Project Success, a reading program designed to help "learning disabled" university students who could only read at approximately the 5.3 grade level, was shown to advance these students in eight weeks 1.8 grade levels; i.e., these reading handicapped students moved from the fifth grade, third month to the seventh grade, first month. As the director of this reading program commented, "The gain is...remarkable when considered against their previous gain of 5.3 grade levels over 12 years of instruction."⁹³ It must be noted, all these students had been in either an elementary or secondary special education program, or both.

Lest one think this study has no relevance because there is such a difference in cognitive ability between college students and those in correctional institutions, it should be noted that "it has become apparent that deficiency of intellect is not among the more important characteristics of delinquents."⁹⁴ A more current study of 1300 incarcerated delinquent males in Nevada, using IQ scores as

⁹²Patrick, Groff, <u>Private Sector Alternatives for Preventing</u> <u>Reading Failure</u>. Portland, OR: Educational Research Associates, 1990. p. 83.

⁹³Robert T. Nash, <u>Testing the Effectiveness of the Project</u> <u>Success Postsecondary Transition Program for Adults with Learning</u> <u>Disabilities</u>. Oshkosh: University of Wisconsin - Oshkosh, n.d. p. 14.

⁹⁴S. Gluek and E. Gluek, <u>Delinquents in the Making</u>. N.Y.: Harper, 1952. p. 118.

a gauge for determining the ability to learn, refutes any notion that incarcerated delinguents are incapable of learning:

First, the average youth was not mentally unable to comprehend normal lessons....Second, the range (46-130) reflected a larger percentage in the normal and above normal range than previously reported. Of the reported, 78% were found to be in the 90-130 range as compared to a normal population finding of 84%. But there were 24.4% found in the 110+ range as opposed to the normal population of 16%⁹⁵.

Disregarding the fact that IQ scores are a weak measure of intellectual potential, if these students are capable of comprehending "normal lessons," then surely they, and others like them, can learn to read and write, using their own vocabularies.

Longstanding empirical evidence based upon replicated research attests to the effectiveness of language arts programs that include intensive, systematic phonics instruction.⁹⁶ The greatest obstacle, then, to teaching students to decode accurately, fluently and effortlessly is to be found in the lack of knowledge reading teachers have about phonetics and phonics methods and in their inability to evaluate and use reading or language arts programs which develop phonemic awareness and processing, include intensive systematic phonics instruction, and use direct instruction strategies.

⁹⁵Glenn W. Harper, "Mental Ability and Academic Achievement of Male Juvenile Delinquents," <u>Journal of Correctional Education</u>, vol.39, no. 1, March, 1988. p. 21.

[%]For a selective annotated bibliography of experimental research on intensive, systematic phonics instruction, see Appendix B.

SURMOUNTING THE PROBLEM

If delinquency and recidivism are to be substantially reduced, and if greater economic opportunity is to be made available to a greater number of incarcerated offenders, it is imperative that reading instruction be greatly improved. Without any diagnosed organic disorders, all students should be able to read what they can understand. Of course, there are students who have cognitive deficits that will make high levels of comprehension very difficult, if not impossible. On the other hand, when there are incarcerated juvenile offenders who, after ten years of school, read form for from and saw for was, who confuse d for b, who confuse the sequence of letters in words, such as ligth for light, and who spell crater for correct and erzot for result,97 the fault lies squarely with the method of instruction when no organic abnormality can be found. This type of incorrect reading and spelling can be prevented, and though difficult to correct once internalized, can be corrected with effort.⁹⁸

For this to occur, two things must happen: First, reading teachers need to be provided an opportunity to see that English spelling is in fact highly consistent phonetically, logical and rational. At present most reading teachers believe the opposite to be true, due to faulty preservice reading methods courses. This distorted perception of English spelling makes it unlikely they

⁹⁷Legislative Budget Committee, op. cit., p. 14.

⁹⁸Hilde L. Mosse, op. cit.

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will want to use any kind of intensive, systematic phonics program. Until perceptions change, current methods advocating sight-words, phonetic clues and context clues will not change. Excluding learning theory, theories of reading instruction are ultimately based upon the perception of the spelling system. Until English spelling is perceived as logical, rational and highly consistent phonetically, which it can be shown to be,⁹⁹ most teachers will continue to use some form of whole-word instruction.

Secondly, assuming teachers are willing to consider using intensive, systematic phonics methods, it will be necessary for them to learn the alphabetic code and how it works as well as be able to select reading programs that have an effective track record for advancing literacy. Moreover, they must be able to diagnose specific reading and writing deficits students have; to design and implement instructional programs that will address these deficits; and to distinguish between incidental and intensive, systematic phonics methods, the latter being required when students cannot decode accurately, fluently and effortlessly their own language after six years of education. According to <u>Research Within Reach</u>, this type of instruction can best be described as:

... teaching subskills and sets of subskills to the point where they can be performed accurately, rapidly, and with minimal attention. These subskills [must be] combined or integrated with other skills that have already been acquired. This integration process continues until the

⁹⁹Based upon my experience of having instructed over 700 reading teachers in 30 and 45 hour workshops in intensive, systematic phonics, I found them enthusiastically responsive to this instruction once they saw that English spelling was in fact logical, rational and highly consistent phonetically. separate skills are performed in a smooth, integrated fashion that more and more resembles fluent reading.¹⁰⁰

Of course, there is more to reading than teaching subskills and their integration with other skills. The advocates of intensive systematic phonics methods further maintain, as this research recommends, that students:

...should be given ample opportunity to practice the skills they are learning by using them to read various kind of meaningful materials...Students should have plenty of practice so they become "comfortable" with all of their newly learned skills. (Although these recommendations are not well documented by research, many researchers share our opinions and offer similar suggestions for integrating the subskills of reading.)¹⁰¹

If reading teachers and administrators, be they serving in public schools or in correctional institutions, want to provide reading instruction that will contribute to reducing delinquency and recidivism, they must be provided inservice training. This training must provide reading teachers the opportunity to become knowledgeable about the alphabetic code, as well as confident in developing phonemic awareness, implementing intensive systematic phonics programs and using direct instruction strategies. Only in this way can teachers be expected to help handicapped readers become successful and confident readers in the shortest time possible.

Though there may be some exceptions, most likely this inservice training will only be found outside schools, colleges and

¹⁰⁰Phyllis Weaver, <u>Research Within Reach; A Research-Guided</u> <u>Response to Concerns of Reading Educators</u>. Washington, D.C.: The National Institute of Education. p. 10.

¹⁰¹Ibid., p. 11.

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departments of education, because, as it has been noted by highly respected research scholars within the educational community:

...an effective national reading effort should bypass the existing education macrostructure. At a minimum, it should provide alternatives to that structure. That is, the planning, implementing, and discretionary powers of budgeting should not rest with those most likely to have a vested interest in maintaining the status quo, especially given their unpromising "track record."¹⁰²

Fortunately, information about effective inservice training programs is available. Education Research Associates (Portland, Oregon), for example, has published <u>Private Sector Alternative for</u> <u>Preventing Reading Failure</u>, a directory of 27 private sector literacy providers that have a proven track record of providing inservice training not only in intensive systematic phonics instruction, but also in other aspects of research-based reading instruction. Every program is described in terms of the following categories: Number and location of sessions in a year's time; length of session and cost; student grade level stressed; program design for credentialed teachers and/or nonprofessionals; instructional materials used; curricular emphasis; teacher and program evaluation.¹⁰³

¹⁰²N. Saxe and R. H. deLone, "The Political Implications of a National Reading Effort," in J. B. Carroll and J. S. Chall (Eds.) <u>Toward a Literate Society</u>. N.Y.: McGraw, 1975. p. 327.

¹⁰³Patrick Groff, <u>Private Sector Alternatives for Preventing</u> <u>Reading Failure</u>.

Specialized Resources

In addition, there are three other valuable sources¹⁰⁴ of assistance for reading teachers not included in this directory: The first is the Orton Dyslexia Society (ODS) which has published some of the most useful research¹⁰⁵ on dyslexia and learning disabilities related to reading and language handicaps, as well as instructional methods to address these handicaps. Through its national and regional conferences, symposia and workshops over the past 40 years, it has disseminated this information to its members, most of whom are special reading teachers who work with students who have been diagnosed learning disabled or dyslexic and are in remedial reading or language arts programs.¹⁰⁶

The Society's effort, to a great extent, has been focused on these students and special programs, with less attention given to prevention of reading failure. However, there is some evidence this may be changing. Because there is a tremendous amount of professional talent within the Society -- medical doctors, research scholars, and uniquely trained reading specialists -- one can only

¹⁰⁴The addresses for these organizations are provided in Appendix A.

¹⁰⁵ODS research is published annually, entitled <u>Annals of</u> <u>Dyslexia</u>.

¹⁰⁶In particular, the Orange County (CA) Chapter of the ODS has been highly successful in developing an effective reading program for juvenile offenders. Information about this program can be obtained from Dr. James Swanson, University of California Irvine, Child Development Center, 19262 Jamboree Boulevard, Irvine, CA 92715. hope that the future leadership of ODS will direct increased attention toward preventing reading failure.

Unlike the ODS which concentrates mainly on remedial instruction, the Association for Direct Instruction (ADI) focuses both on prevention and remedial instruction. Serving elementary and secondary students in public and private schools as well as juvenile correctional institutions, ADI also provides inservice education and training for reading, language arts and math teachers through regional conferences and workshops. ADI members are kept abreast of new research, program development, instructional breakthroughs and critiques of educational topics through a guarterly publication, <u>The ADI News</u>.

An important feature of ADI instructional materials is that the teaching strategies and learning activities have all been field tested to determine the validity of the theory supporting them, and moreover, this field testing is done prior to the materials being published.

Besides being well known for its extremely effective programs for teaching accurate and fluent decoding, ADI has, in addition, developed instructional strategies for teaching both reading comprehension, vocabulary and spelling for at-risk students. The validated effectiveness of these and other ADI programs results from instructional design that gives equal attention to both the logical sequencing of learning tasks as well as the teaching strategies required for presenting instruction. Monitoring student learning is accomplished in such a way as to ensure retention.

Although there is a preponderance of evidence to show the importance of intensive, systematic phonics teaching and direct instruction for those who cannot read accurately and fluently, in and of itself, this evidence can accomplish nothing unless brought to bear on the decision-makers who are responsible for selecting reading and language arts programs. For the present scenario to change, decision and policy-makers must come to see that it is within their power not only to bring about improved reading instruction but also to institutionalize that improvement. Until just recently researchers have been long on recommendations that tell what organizational structures and processes must be changed, but short on what outcome objectives must be realized and how to obtain them if the prevention of reading failure and reduced recidivism is to be achieved.

This critical obstacle to reform has been removed by a newly formed non-profit corporation of professional educators and research scholars, entitled the International Institute for Advocacy for School Children (I'ASC). Its primary mission is to inform the business community, educational decision-makers, politicians, and most of all, parents about instructional practices that are discriminatory in that they do not even work with one out of four students as promised. Such instructional programs can truthfully be said to contribute to "academic child abuse."

I'ASC is committed to instructional practices that are effective with all students who would fall in the normal-to-aboveaverage IQ range (85 and above). These students, I'ASC maintains,

can and should learn the subjects in the core curriculum: reading, mathematics, language, writing and science.

As advocates of children, I'ASC does not recommend or promote particular programs, but rather it requires:

scientific and sensible quality-control procedures to safeguard against instructional practices and programs that are experimental in nature [like whole-language], having never been demonstrated to work well with children. These safeguards include: securing adequate data that an approach is superior before installing it; requiring published material to be validated through learner verification (small-scale, carefully monitored implementation) before it is adopted on a large scale; replacing approaches as soon as they begin to fail; and keeping records of what works and what doesn't.¹⁰⁷

I'ASC holds the position that decision-makers should be held "entirely accountable for academic child abuse, which is signalled by a greater failure rate than the rate possible with the same population and different instructional practices."¹⁰⁸ All too frequently teachers are blamed for student failures when in fact all they have done is "follow the ill-advised and unprofessional mandates of decision-makers."¹⁰⁹ Two position papers published by I'ASC provide ample concrete examples of what constitutes academic child abuse as well as what actions must be taken to eliminate it.

The means of substantially reducing recidivism and increasing employment opportunity for all students is an obtainable goal. The means for achieving it are available. Only one question remains:

¹⁰⁷<u>I'ASC Mission Statement</u>, p. 1
¹⁰⁸Ibid.
¹⁰⁹Ibid., p. 2.

Is there sufficient will to abandon academic child abuse in favor of increased opportunity for all?

VII

RECOMMENDATIONS

The foregoing investigation makes clear that impaired reading skills, beyond just being a correlative of delinquency and academic failure, appears to be one cause of academic failure, as well as of delinquency. Though it cannot be said to be the only cause of delinquency, the research strongly suggests that it may be the major cause in that the inability to read in an academic environment produces sustained frustration which can, and in many cases does, lead to antisocial aggression.

All too often this reading failure results not so much from cognitive deficits as from instructional methods based upon speculative theory. Empirical evidence of experimental research is rejected in favor of commitment to speculative theory. The debilitating impact this has on students intellectually, psychologically and emotionally appears to be of little or no concern to those responsible for teacher education. This lamentable situation need not exist. As has been shown, reading failure, for the most part, is preventable, and where it has occurred, effective corrective instruction can turn failure into success. Juvenile correctional institutions, public schools, schools of education, business and industry, foundations, and state agencies all have important roles to play in bringing about this success. The

following recommendations are made in hopes of helping these constituencies to improve reading instruction in measurable ways.

Correctional institutions

- Seek out and employ private sector literacy providers that can train the reading and language arts teachers in intensive, systematic phonics as well as provide postinservice technical assistance as it pertains to implementing research-based reading instruction.
- Adopt for the teaching of reading the instructional materials recommended by the private sector literacy providers who train the reading teachers.
- Accept course work taken with private sector literacy providers that train reading teachers in intensive, systematic phonics methods as evidence of teachers' qualifications for increases in salary and/or promotion.

Public schools

- Implement the above recommendations as well as the following:
- Subsidize from district funds the cost to teachers for enrolling in courses in the teaching of intensive, systematic phonics. This costs would be more than offset by the reduction in costs of most commercial programs that require consumable materials.
- Provide bonuses in salary for teachers who achieve the greatest relative success in their instruction in reading.

Schools of education

Prompt representatives of private sector literacy providers providing instruction in intensive, systematic phonics to present the details of their proposals for the teaching of reading in both the preservice and inservice courses in reading that these departments, colleges, or schools of education offer. (Private sector literacy providers should entreat departments of education to provide them this opportunity to discuss their programs if the departments do not take the initiative in this regard. Some of the sharpest criticism of the lack of effectiveness of departments of education has come from chairmen of such departments. These critics of their own efforts appear eager to find ways to upgrade the quality of training they afford teachers.) Acknowledge the course work in the training of teachers offered by private sector literacy providers by using their good offices to gain approval of this course work for teacher credential requirements. Since reading courses offered by private sector literacy providers are already honored by extension departments, it seems logical that credit for these courses should be accepted in part for reading credential requirements.

Business and industry

- Provide financial grants to juvenile correctional institutions and public and nonpublic schools for the purpose of reimbursing the teachers, wholly or in part, for the costs of their enrollments in private sector courses in the teaching of reading. It is estimated that it costs business and industry \$25 billion a year to teach their employees basic literacy skills. An investment in training of reading teachers in intensive, systematic phonics would help prevent the perpetuation of this financial drain on their resources.
- Consider the possibility of acquiring (purchasing) certain private sector literacy providers that now train teachers of reading. Because of the present crisis in literacy development in the country, the field of literacy training represents an attractive field for potential commercial investment. Some private sector literacy providers could be easily accommodated as a subsidiary of any major corporation interested in educational production or implementation.

Foundations

- Provide "seed" monies for private sector literacy providers that train teachers in intensive, systematic phonics instruction to help them with product development and marketing.
- Provide financial grants to juvenile correctional institutions and public and nonpublic schools for the purpose of reimbursing teachers for the costs of their enrollments in courses in intensive systematic phonics instruction offered by private sector literacy providers. Were foundations to subsidize the private sector delivery of training in the teaching of reading, they would through this action give a significant impetus to the movement to improve literacy development in the nation.

State agencies

 Accept course work taken with private sector literacy providers that train reading teachers as partial fulfillment of the requirements of these credentials. Private sector training of reading teachers can be given the same status for credentialing purposes as that awarded training offered by departments, colleges and schools of education.

APPENDIX A

Association for Direct Instruction. P. O. Box 10252, Eugene, OR 97440

Educational Research Associates. 812 SW Washington, Stevens Bldg., 7th Floor, Portland, OR 97205

International Institute for Advocacy for School Children. 296 West 8th Avenue, Eugene, Oregon 97401

The Orton Dyslexia Society. Chester Building, Suite 382, 8600 LaSalle Rd., Baltimore, MD 21204-6020

APPENDIX B¹¹⁰

The following list of conclusions from academic surveys of what the experimental research says about the significance of phonics in the acquisition of reading is a representative sample of reviews. A comprehensive collection of over 125 of these reviews is found in P. Groff (1987) <u>Preventing Reading Failure: An</u> <u>Examination of the Myths of Reading Instruction</u>. Portland, OR: National Book.

The reviews of the empirical research on the place of phonics in reading development give overwhelming support to the heavy emphasis on the intensive teaching of phonics...On the other hand, the research on phonics does not confirm the general practice by departments of education to advise teachers to teach phonics in an indirect, unsystematic, incidental, and delayed manner, and to replace the teaching of phonics with instruction to their pupils on sight words and context cues.

Adams, Marilyn J. (1990). <u>Beginning to Read: Thinking and Learning</u> <u>about Print</u>. Cambridge, MA: MIT Press.

"Across this book, I have argued that proficient reading depends on an automatic capacity to recognize frequent spelling patterns and to translate them phonetically" (p. 291). "Acquisition of these skills depends in part on the child's conscious awareness of the phonological structure of speech. ...Such knowledge can be productive only given an awareness that words consist of strings of letters" (p. 333).

Anderson, R. C., et al. (1985). <u>Becoming a Nation of Readers: The</u> <u>Report of the Commission on Reading</u>. Washington, D.C.: National Institute of Education, U.S. Department of Education.

"Classroom research shows that, on the average, children who are taught phonics get off to a better start in learning to read than children who are not taught phonics. The advantage is most apparent on tests of word identification, though children in programs in which phonics gets a heavy stress also do better on tests of sentence and story comprehension, particularly in the early grades" (p. 37). "The picture that emerges from the research is that phonics facilitates word identification and that fast, accurate word identification is a necessary, but not sufficient, condition for comprehension." (p. 37)

¹¹⁰This revised bibliography and introductory remarks were prepared by Dr. Patrick Groff, San Diego State University, San Diego, CA. Balmuth, M. (1982). The Roots of Phonics. New York: McGraw-Hill.

"The simple fact is that, for those who are learning to read and spell, phonics is the inescapable essence of every word" (p. 2).

Baron, J. (1977). "Mechanisms for Pronouncing Printed Words: Use and Acquisition." In D. LaBerge & S. J. Samuels (Eds.), <u>Basic</u> <u>Processes in Reading: Perception and Comprehension</u>. Hillsdale, N.J.: Lawrence Erlbaum.

"Orthographic rules are important in fluent reading. Their availability is helpful in reading words out loud. Given this, it is likely that they are just as helpful in converting print into the kind of surface phonological representation that seems useful when short-term memory is required." "We have shown so far only that he [the child] must learn them [phonics rules] eventually if he is to have a full battery of reading skills" (p. 204). "Aside from such empirical evidence, there are practical arguments for the importance of [phonics] rules in early learning. The most convincing of these is the fact that the beginning reader who knows the rules can in essence teach himself to read" (p. 205).

Barron, R. W. (1986). "Word Recognition in Early Reading: A Review of the Direct and Indirect Access Hypotheses." <u>Cognition</u>, 24, 93-119.

The research evidence "suggests that children begin to make the transition from nonreaders to readers by acquiring rudimentary letter-sound/name knowledge" (p. 111).

Beck, I. L. (1982). "Reading Problems and Instructional Practices." In T. G. Waller and G. E. MacKinnon (Eds.), <u>Reading Research:</u> <u>Advances in Theory and Practice, Vol. 2</u>. New York: Academic.

The independent conclusion of prominent researchers are remarkably similar as they point out that "(1) there is evidence that a code-emphasis approach teaches the word recognition aspect of reading more effectively, and (2) ...there is no evidence that it inhibits comprehension" (p. 74).

Bryant, P. L. & Bradley L. (1985). <u>Children's Reading Problems</u>. New York: Basil Blackwell.

Finds the research to say that "sensitivity to the sounds in words plays an important part in most children's success or failure in reading. Any child's skill with sounds will play a significant part in deciding whether he reads better or worse than would be expected" (p. 153). Thus, "backward readers are bad at dealing with the sounds imbedded in speech" (p. 74).

Calfee, R. C. & Drum, P. A. (1978). "Learning to Read: Theory, Research and Practice." <u>Curriculum Inquiry</u>, 8, 183-249.

"We have examined typical research put forward in support of the 'decoding but not comprehending' position, and found it actually supports the opposite position." "We have yet to encounter a student who could decode fluently but failed to comprehend" (p. 238).

Calfee, R. & Drum, P. (1986). "Research on Teaching Reading." In M. C. Whittrock (Ed.), <u>Handbook of Research on Teaching</u>. New York: Macmillan.

Decoding "clearly is a critical aspect of reading acquisition" (p. 825). "On the empirical side, substantial evidence speaks to the advantage of early phonics" (p. 812). "Most children need some guidance in figuring out the 'writing game'" (p. 816). "The competent reader decodes with accuracy, but with fluency, as well" (p. 821).

Chall, J. S. (1967). <u>Learning to Read: The Great Debate</u>. New York: Macmillan.

The phonics approach (code-emphasis) "produces better results, at least up to the point where sufficient evidence seems to be available, the end of the third grade. The results are better, not only in terms of the mechanical aspects of literacy alone, as was once supposed, but also in terms of the ultimate goals of reading instruction -- comprehension and even speed reading" (p. 307).

"The research evidence from the classroom, the clinic, and the laboratory is also stronger now [1983] for a code-emphasis than it was in 1967" (p. 37, Second edition, 1983).

Chall, J. S. (1989). "Learning to Read: The Great Debate 20 Years Later." <u>Phi Delta Kappan</u>, 70, 521-538.

"Research evidence does not support meaning-emphasis approaches over code-emphasis approaches for beginning reading, even though the former are couched in a rhetoric of warmth, openness, and great promise" (p. 532).

Downing, J. & Leong, C. K. (1982). <u>Psychology of Reading</u>. New York: Macmillan.

"The complimentary findings suggest that facility in decoding and extraction of word meaning are related. Less skilled comprehenders are deficient or inefficient in the utilization of decoding skills" (p. 313).

Dechant, E. (1991). <u>Understanding and Teaching Reading: An</u> <u>Interactive Model</u>. Hillsdale, NJ: Lawrence Erlbaum.

The research indicates that the pupil must "construct a generic code or coding system that has wider applicability in reading than would the rote identification of individual words. ...Such a code can only be developed by teaching children the grapheme-phoneme correspondence" (p. 295).

Farnham-Diggory, S. (1986). "Introduction," 3rd rev. ed. In R. B. Spalding & W. T. Spalding, <u>The Writing Road to Reading</u>. New York: William Morrow.

"Children can easily learn isolated phonemes, and once they have learned them, they can easily identify them in words. Once they understand what they are supposed to be listening for, they can readily categorize a wide range of /p/ sounds as all being represented by the same letter p. The research evidence on this point is absolutely beyond dispute" (p. 12.)

Feitelson, D. (1988). <u>Fact and Fads in Beginning Reading</u>. Norwood, NJ: Ablex.

"Most experts on the reading scene feel that early on in the learning process beginning readers will have to be introduced to the way speech sounds are represented by letters" (p. 76).

Finn, C. E. (1986). <u>What Works: Research about Teaching and</u> <u>Learning</u>. Washington, D.C.: U.S. Department of Education.

"Recent research indicates that, on the average, children who are taught phonics get off to a better start in learning to read than children who are not taught phonics" (p. 21). Fowler, C. A. (1981). "Some Aspects of Language Perception by Eye." In O. J. L. Tzeng & H. Singer (Eds.), <u>Perception of</u> <u>Print</u>. Hillsdale, NJ: Lawrence Erlbaum.

"Studies suggest that children do exploit the spelling-tosound route of access to the lexicon in their reading" (p. 188). Research also verifies that "the sound system must be critically involved in the reading process independently of level of reading skill" (p. 184). This, "holistic association of a written word to a spoken word would seem to have little to recommend it" (p. 185). Studies also show that "phonetic or phonological units are normally involved in the procedures surrounding the memory and comprehension of text" (p. 193).

Gaskins, I. W., et al. (1988). <u>A Metacognitive Approach to</u> <u>Phonics: Using What You Know to Decode What You Don't Know</u>. Champaign, IL: Center for the Study of Reading, University of Illinois.

"One of the characteristics that often distinguishes good readers from poor readers is automaticity in decoding words. ...The Research suggests that good readers recognize the vast majority of words automatically and independently of context. ...The inability to break the code becomes a serious roadblock to fluent reading and good comprehension" (p. 2).

Groff, P. (1990). "An Analysis of the Debate: Teaching Reading without Conveying Phonics Information." <u>Interchange</u>, 21 (4), 1-14.

"There have been numerous experimental studies of the proposition that children taught phonics information directly, intensively, and systematically will develop greater reading ability over a given period of time than will children given indirect, incidental, and unsystematic (implicit) phonics instruction" (p. 3). "All concluded that reading programs that include aspects of explicit phonics instruction develop more able readers" (p. 4).

Groff, P. & Seymour, D. Z. (1987). <u>Word Recognition</u>. Springfield, IL: Charles C. Thomas.

"The research indicates we cannot merely say that children should learn phonics. To the contrary, the indications are they must learn it if they are to recognize words." (p. xii).

Grossen, B. & Carnine, D. (1990). "Translating Research on Initial Reading Instruction into Classroom Practice." <u>Interchange</u>, 21 (4), 15-23.

"The research of the past few decades strongly indicates that a phonic approach in the initial two years of reading instruction is better than the whole-word approach" (p. 15).

Gurren, L. & Hughes, A. (1983). "Intensive Phonics vs. Gradual Phonics in Beginning Reading: A Review." In L. M. Gentile, M. L. Kamil & J. S. Blanchard (Eds.), <u>Reading Research</u> <u>Revisited</u>. Columbus, OH: Charles E. Merrill.

Survey of "first-grade studies illustrated that skill-based instruction which emphasizes decoding had an edge in efficiency over language-based approaches" (p. 120) "Low achievers [in reading] seem to be inferior to higher achievers on: decoding accuracy, decoding speed" (p. 130) Accordingly, "acquisition of proficient decoding represents the major problem in early stages of reading' (p. 117).

Henderson, L. (1982). <u>Orthography and Word Recognition in Reading</u>. New York: Academic.

Studies indicate "that look-say methods lead to an early acquisition of a small sight vocabulary and then little progress beyond this" (p. 166).

Hume, C. (1981). <u>Reading Retardation and Multi-sensory Teaching</u>. London: Routledge & Kegan, Paul.

Research in the field suggests that "an application of phonics enables a child to utilize this knowledge by supplying a strategy for translating written language into its spoken form. This allows new words to be deciphered; self-instruction may take place." Without phonics "each new word must be learnt as a unique entity, greatly increasing the load on memory" (p. 36). "An impairment in accessing the lexicon via a phonological route may provide an explanation for the retarded reader's problem" (p. 169).

Johnson, D. D. & Baumann, J. F. (1984). "Word Identification." In P. D. Person (Ed.), <u>Handbook of Reading Research</u>. New York: Longman.

The research indicates that "programs emphasizing early, reasonably intensive phonics instruction produce readers who are more proficient at word pronunciation than programs emphasizing meaning." "The message is clear: if you want to improve word-identification ability, teach phonics" (p. 594). Just, M. A. & Carpenter, P. A. (1978). <u>The Psychology of Reading</u> <u>and Language Comprehension</u>. Boston, MA: Allyn & Bacon.

"Word decoding skill is an important determinant of reading fluency" (p. 328). Therefore, "for most children, decoding is a major skill to be acquired in early reading" (p. 326). "Word decoding is an important component in early reading skill. This hypothesis is supported by several sources of evidence" (p. 327).

Liberman, I. Y. & Shankweiler, D. (1985). "Phonology and Problems of Learning to Read and Write." <u>Remedial and Special Educa-</u> <u>tion</u>, 6, 8-17.

The research suggests that "difficulties in the phonological domain are sufficient to cause problems in sentence understanding" since phonics ability helps the reader "retain the words in the sentences and their order, briefly, while the information is processed through the several levels from sound to meaning" (p. 13).

Massaro, D. W. (1974). "Primary and Secondary Recognition in Reading." In D. W. Massaro (Ed.), <u>Understanding Language</u>. New York: Academic.

Models of reading that propose that the reader can go from visual features directly to meaning "simply do not have the machinery to describe what is known about reading" (p. 278). "We are not aware of any support for the notion that a phrase can be recognized before any of its component words" (p. 276).

McGuinness, D. (1985). <u>When Children Don't Learn</u>. New York: Basic Books.

Finds that research indicates that "phonemic decoding and encoding is the central problem in the mastery of any phonetic writing system" (p. 58). "A system based on phonetic and orthographic rules is far more efficient than memorizing each word separately" (pp. 58-59). Miles, E. (1981). "A Study of Dyslexic Weaknesses and the Consequences for Teaching." In G. T. Pavlidis & T. R. Miles (Eds.), <u>Dyslexia Research and Its Application</u>. New York: John Wiley.

Research with the dyslexic child suggests that "the risk [from teaching phonics] that he will be merely 'barking at print' -- that is, reading accurately without understanding -- is minimal since typically he is a child of good comprehension but inaccurate word attack. If, therefore, he is reading without understanding it is probably because the phonic difficulties of that particular text are so great that he cannot consider the meaning as well as make the right sounds" (p. 122).

Mosse, H. L. (1982). <u>The Complete Handbook of Children's Reading</u> <u>Disorders, Vol. 1</u>. New York: Human Science. (Reissued by Riggs Institute Press, Portland, OR, in a paperback ed. under the title, <u>You Can Prevent or Correct Learning Disorders</u>.

Agrees that the research says that "teachers who used a method that the new anti-phonics movement would recommend found that the pupils they so instructed developed significantly less ability in reading than pupils of teachers who gave early, intensive phonics to their beginning readers" (p. 122).

Perfetti, C. A. (1985). <u>Reading Ability</u>. New York: Oxford University.

Concludes that the research says that "learning to read is learning associations between print stimuli and oral language responses" (p. 216). "In learning to read an alphabetic language, a major factor is the abstractness of the phonemes onto which letters are to be mapped" (p. 230) "Successful readers...advance, with practice at reading, to a stage of facility that is characterized by speeded word processes." This "word-processing efficiency leads to better comprehension, rather than being a by-product of comprehension" (p. 231). Resnick, L. B. (1979). "Theories and Prescriptions for Early Reading Instruction." In L. B. Resnick and P. A. Weaver (Eds.), <u>Theory and Practice of Early Reading, Vol. 2.</u> Hillsdale, NJ: Lawrence Erlbaum.

"The review of field research in reading has suggested an advantage for code-oriented teaching roughly through the primary school years." "We need to include systematic, codeoriented instruction in the primary grades, no matter what else is also done." "The charge...that too early or too much emphasis on the code depresses comprehension finds no support in the empirical data" (p. 329). "Empirical evidence appears to support the code-first position. Initial emphasis on the code in a direct instruction program produces initial advantages and no long-term disadvantages" (p. 333).

Samuels, S. J. & Schachter, S. W. (1978). "Controversial issues in Beginning Reading Instruction: Meaning versus Subskill Emphasis." In S. Pflaum-Connor (Ed.), <u>Aspects of Reading</u> <u>Education</u>. Berkeley, CA: McCutchan.

Research indicates that "one important prerequisite is the development of decoding skills. These skills must be brought beyond the level of mere accuracy to the level of automaticity. When these skills become automatic, the student is able to decode the printed symbols without the aid of attention, thereby freeing attention for the all-important task of processing meaning" (p. 60).

Stanovich, K. E. (1982). "Word Recognition Skill and Reading Ability." In M. H. Singer (Ed.), <u>Competent Reader, Disabled</u> <u>Reader: Research and Application</u>. Hillsdale, NJ: Lawrence Erlbaum.

"The bulk of the research evidence suggests that word recognition ability represents a causal factor in the development of reading skill" (p. 86). "Most children with reading difficulties have problems decoding words" (p. 87). Experimental results indicate that skilled readers, but not un-skilled readers, exploit a phonological code" (p. 88). "There is a strong relationship between word recognition speed and reading ability, particularly in early grades" (p. 83). So, "in order to get <u>started</u>, to begin to attain the levels of practice that make fluent reading possible, the child must engaged in an effort to break the spelling-to-sound code" (p. 90). That is, the "evidence suggests that phoneme segmentation skill is a prerequisite or facilitator of reading ability" (p. 92). Treiman, R. (1985). "Phonemic Analysis, Spelling, and Reading." In T. H. Carr (Ed.), <u>The Development of Reading Skills</u>. San Francisco, CA: Jossey-Bass.

"Because of the alphabetic nature of English writing, many investigators have suggested that the ability to conceive of spoken words as sequences of phonemes is important in learning to read and write" (p. 5).

Weaver, P. (Ed.) (1978). <u>Research within Reach: A Research-quided</u> <u>Response to Concerns of Reading Educators</u>. Washington, D.C.: U.S. Department of Education.

"We suggest that decoding be a primary objective of early reading instruction" (p. 59). "We recommend for teaching purposes that reading be viewed as a set of subskills that can be taught and integrated" (p. 7). "Research has demonstrated the importance of word recognition skill for overall reading performance" (p. 19). It shows that "there are some skills that seem to be very important for learning to read." Among these are "Being able to manipulate phonemes in words and understanding the conventions of printed language" (p. 32). The research "results tend to favor early and systematic code instruction over a whole word approach" (p. 65).

"Consequently, we recommend that expert and automatic decoding be a primary goal of early grades reading instruction" (p. 60).

Williams, J. (1979). "The ABD's of Reading: A Program for the Learning Disabled." In L. B. Resnick & P. A. Weaver (Eds.), <u>Theory and Practice of Early Reading, Vol. 3</u>. Hillsdale, NJ: Lawrence Erlbaum.

"More and more studies have corroborated this point of view": an "instructional program which develops word analysis skills to a high level of proficiency shows some transfer of these skills to the reading task." Thus, "it is clear that progress in beginning reading is related to proficiency in those auditory skills that can be identified as components of the decoding process" (P. 183).