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There is growing evidence indicating a correlation between children with learning problems and children demonstrating juvenile delinquent behavior. Agencies and institutions dealing with juvenile justice and education in five States were visited, and consultants in remedial education conducted numerous psychological tests to derive a sample of learning problems of institutionalized juveniles. Findings/Conclusions: One-fourth of the juveniles tested in the studies had primary learning problems. Academic underachievement was graded as mild, moderate, or severe, corresponding from 2 years below grade level to the absence of all academic skills. Whether these disabilities caused delinquency is uncertain; the question warrants further examination. Ameliorating such disabilities is justified for its own sake; moreover, it just may have the added benefit of reducing delinquency. Recommendations: The exact relationship of these disabilities to delinquency should be studied. The Department of Health, Education, and Welfare, in conjunction with the States, should develop comparable prevalence rates of children with learning disabilities, and the resources needed to combat these problems. The Law Enforcement Assistance Administration should require juvenile correctional facilities to make use of diagnostic information helpful to the needs of their charges. (DJM)

# REPORT TO THE CONGRESS



BY THE COMPTROLLER GENERAL  
OF THE UNITED STATES

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## Learning Disabilities: The Link To Delinquency Should Be Determined, But Schools Should Do More Now

Departments of Justice and  
Health, Education, and Welfare

One-fourth of the juvenile delinquents in institutions tested by GAO consultants had primary learning problems (learning disabilities). Whether these disabilities caused delinquency is uncertain; the question warrants further examination. The nature, extent, and direction of the relationship, if any, between learning disabilities and delinquent behavior should be determined.

The Department of Health, Education, and Welfare should develop prevalence rates of children having learning disabilities, determine the resources needed to combat the problems, and develop procedures so that such children are adequately diagnosed and treated.



COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON, D.C. 20548

B-168530

To the President of the Senate and the  
Speaker of the House of Representatives

This report discusses the extent of learning problems among institutionalized juvenile delinquents and describes the efforts of public schools and correctional institutions to deal with such problems.

We made this review because of the Nation's growing juvenile delinquency problem and the mounting evidence of a correlation between children with learning problems and children demonstrating delinquent behavior patterns.

We made our review pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67).

We are sending copies of this report to the Director, Office of Management and Budget; the Attorney General; and the Secretary of Health, Education, and Welfare

  
ACTING Comptroller General  
of the United States

D I G E S T

There is little doubt that most juvenile delinquents have behavior problems in school, and many may be "academic underachievers"--pupils of normal intelligence who are two or more years below the level expected for their ability.

GAO investigated underachievement among juvenile delinquents in institutions and found that about one-fourth of those tested by education consultants in Connecticut and Virginia institutions had primary learning problems or learning disabilities. (See pp. 5 to 9.)

Whether these disabilities caused delinquency is uncertain.

Compensating for or correcting such disabilities is justified for its own sake. It just may have the added dividend of reducing delinquency. There is room for much improvement in this regard in the public school system and in institutions housing delinquents.

--Four of the five States visited by GAO-- California, Connecticut, Texas, and Virginia-- had no accurate estimates of the prevalence of learning disabilities among school-age children. (See pp. 23 to 26.)

--Correctional institutions were not effectively identifying and treating the learning problems of delinquents and were constrained from doing so. (See pp. 16 to 19.)

Where institutions had attempted to meet the delinquents' educational needs

--the detailed evaluation needed to determine a child's specific problem either was not done or

--if done, the prescribed recommendations were not received by the teacher, or the teaching staff was not trained adequately to implement or interpret the recommendations. (See pp. 19 to 22.)

To address the problem of children not receiving adequate help in the schools and to improve efforts to help children in institutions, the Secretary of Health, Education, and Welfare should direct the Assistant Secretary for Education to develop, in conjunction with the States, valid and comparable prevalence rates of children with learning disabilities. The Secretary should then determine the resources needed to combat the problems and develop procedures so that such children are adequately diagnosed and treated. These steps would be consistent with the intent of existing Federal legislation.

The Attorney General should direct the Administrator of the Law Enforcement Assistance Administration to work closely with the States in developing criminal justice plans that require juvenile correctional institutions to make use of diagnostic information pertinent to the juveniles' educational needs and problems. (See pp. 42 and 43.)

One question that needs answering before an effective Federal strategy to prevent juvenile delinquency can be developed is: To what extent, if any, do learning disabilities generate, precipitate, and/or contribute to delinquent behavior? The Secretary of HEW and the Attorney General should jointly fund a study to determine the nature, extent, and direction of the relationship, if any, between learning disabilities and delinquent behavior. (See pp. 40 to 43.)

A positive relationship could significantly affect the strategy of the Government in

addressing the problem of juvenile delinquency. For example, more emphasis could be placed on special education programs for children with learning disabilities. It could also provide impetus for considering innovative and/or alternative approaches to the prevention of juvenile delinquency and rehabilitation of juvenile delinquents.

For example, more emphasis could be placed on using the results of testing to determine disposition of juveniles when they come in contact with the juvenile justice system. (See pp. 41 and 42.)

Another question with no ready answer is what to do about children who are unsuccessful in acquiring academic skills for a variety of reasons other than learning disabilities. About half of the delinquents tested by GAO consultants had secondary learning problems. Treating the causes of such problems may be beyond the capabilities or purpose of schools.

The Department of Justice agreed with GAO's conclusion that learning problems are extensive among institutionalized juvenile delinquents.

It noted that the Law Enforcement Assistance Administration was undertaking studies of the incidence of learning disabilities among delinquents and nondelinquents and the delinquency reduction potential of a remedial program, and that the results of these studies would provide guidance for subsequent efforts. (See app. II.)

These studies are an appropriate way of beginning such an effort.

HEW concurred in GAO's recommendation to develop prevalence rates of children with learning disabilities and outlined certain steps it was taking in that regard. (See app. III.)

The Department also concurred in the intent of the recommendation for a study to determine the nature, extent, and direction of the relationship (if any) between learning

disabilities and delinquent behavior but noted that

- any such effort should be considered only after an operational definition of learning disabilities, which is currently being developed, has been published in final form and
- safeguards must be built into any study so that researchers do not fall into the temptation of looking for a cause for juvenile delinquency.

In each of the five States, copies of the draft report were provided to appropriate State education and correctional agencies and to the State criminal justice planning agency. Their comments were considered in the report and changes to the report have been made where appropriate. Generally, the States agreed with GAO's observations.

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ABBREVIATIONS

SSEA	Elementary and Secondary Education Act
GAO	General Accounting Office
HEW	Department of Health, Education, and Welfare
LEAA	Law Enforcement Assistance Administration

## CHAPTER 1

### INTRODUCTION

Efforts to reduce and control juvenile delinquency have expanded in recent years. However, youth arrests for all crimes rose 138 percent from 1960 through 1974. In proportion to the national population, juveniles (under 18 years of age) are the largest contributors to the Nation's crime problem. The number of juvenile arrests in 1974 was about 1.7 million, more than 27 percent of the total arrests for all age groups. In that same year, juveniles accounted for about 45 percent of all arrests for serious crimes committed including:

- 19 percent of all arrests for forcible rape.
- 10 percent of all arrests for murder.
- 53 percent of all arrests for burglary.
- 33 percent of all arrests for robbery.
- 49 percent of all arrests for larceny.
- 55 percent of all arrests for motor vehicle theft.

Recidivism rates (repeat offenses) among juveniles are also more severe than among adults, with estimated figures ranging from 60 to 85 percent.

The cost for crimes committed by juveniles is estimated to be about \$16 billion annually. The average cost of incarceration to the States is about \$12,000 per year per child. While these statistics are significant, the greatest cost of all cannot be measured in dollars and cents--the immeasurable loss of human life, personal security, and wasted human resources.

Before passing the Juvenile Justice and Delinquency Prevention Act of 1974, the Congress addressed the Nation's growing delinquency problem through several acts. Under each piece of legislation, delinquency prevention was emphasized as one of the primary action areas. However, most Federal funds programed for juvenile delinquency were spent on rehabilitation projects for those already within the juvenile

justice system rather than on programs designed to prevent children from entering the system for the first time. 1/

Based on the estimated high rates of recidivism among juveniles, these rehabilitation programs seem to be less than successful in either controlling or reducing juvenile crime.

Many factors, including social, cultural, and familial, contribute to a child's delinquency. It is rarely possible to pinpoint one factor alone as being the primary cause. Many theories have been developed on the causes of juvenile delinquency, but no easy cure-all will be found to eliminate it. However, one area which may have potential for affecting delinquent behavior is the Nation's public school systems.

### LEARNING PROBLEMS AND DELINQUENCY

Growing evidence, being established by experts in education, medicine, law enforcement, justice, and juvenile corrections, indicates a correlation between children experiencing academic failure (learning problems) and children demonstrating delinquent behavior patterns. This evidence further indicates that children with learning problems run a risk of turning to delinquency and crime to find the success they failed to achieve within the public schools.

Children with learning problems often experience failure in a regular classroom situation. Psychologists have shown that continued school failure often results in the child developing a negative self-concept and a high level of frustration. The child may begin to become a behavioral and/or a truant problem for the school. If the problem persists, the child can be suspended, expelled, or he may eventually just drop out.

Misconduct seems to be related to a child's academic standing in school, with the highest rates among those with poor grades. A number of factors contribute to this relationship.

1. In our society, school is the only major legitimate activity for children between the ages of 6 and 18.

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1/One of our reports to the Congress entitled, "How Federal Efforts To Coordinate Programs To Mitigate Juvenile Delinquency Proved Ineffective" (GGD-75-76, 4/21/75) discussed the ineffectiveness of previous Federal efforts to prevent or reduce juvenile delinquency.

If a child fails in school, generally there is little else in which he can be successful.

2. The academically unsuccessful child generally does not experience the rational constraints against committing a delinquent act.
3. 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 parents and teachers, but also from other children who are keenly aware of school status based on performance.

Among children who have learning problems are those who have primary learning problems (learning disabilities). (See ch. 2 for definition of terms.) If these deficiencies are not identified, the child may be pushed along in the regular classroom year after year and fall further and further behind. But in nearly every case, the difficulties can be alleviated or corrected if diagnosed in time.

#### OBJECTIVES AND SCOPE OF REVIEW

We made this review because of the (1) significant increases in juvenile crime, (2) growing evidence indicating a correlation between children with learning problems and children demonstrating delinquent behavior patterns, and (3) expanding number of studies indicating that the public schools can have a measurable effect on reducing juvenile crime. We wanted to determine

- how extensive learning problems are among juvenile delinquents in institutions,
- how juvenile institutions identify learning problems and deal with them in their rehabilitation programs,
- what programs are in effect in the public schools to identify children with learning problems and treat such problems, and
- what the involvement of the Federal Government has been in the learning problem area.

We made our review in California, Colorado, Connecticut, Texas, and Virginia. In each of the five States, we did work at the State criminal justice planning agency, State department of correction, State juvenile reception centers, and State-operated institutions for juvenile delinquents.

In all five States except California, we visited all of the State-operated institutions. In California, we visited 3 of the 11 institutions--2 housing males and 1 housing females--because they were the only ones which mostly contained children 18 years old and under and, thus, were comparable to the other States' institutions.

We also visited the States' departments of education, 23 selected school districts, 50 elementary schools, and 30 secondary schools (junior and senior high schools). We interviewed 373 classroom teachers and over 300 other school officials, including superintendents, assistant superintendents, principals, assistant principals, guidance counselors, and educational specialists.

We hired consultants specializing in remedial education to test juveniles chosen randomly from institutions in Connecticut and Virginia. Sixty of the 347 juveniles in the 4 institutions in Connecticut were tested between July and September 1975. Sixty-nine of the 1,247 juveniles in the 7 institutions in Virginia were tested in February and March 1975. The results provide a statistically reliable picture for the institutionalized children of the States when the tests were made. The purpose of these tests was to

- determine the extent of learning problems among juvenile delinquents,
- determine which of the juveniles had primary learning problems (learning disabilities), and
- identify the differing educational needs of juveniles with various types of problems.

In addition, we reviewed the efforts of the Law Enforcement Assistance Administration (LEAA) and the Office of Education, Department of Health, Education, and Welfare (HEW) to determine the extent to which they were addressing the identification and treatment of children with learning problems.

## CHAPTER 2

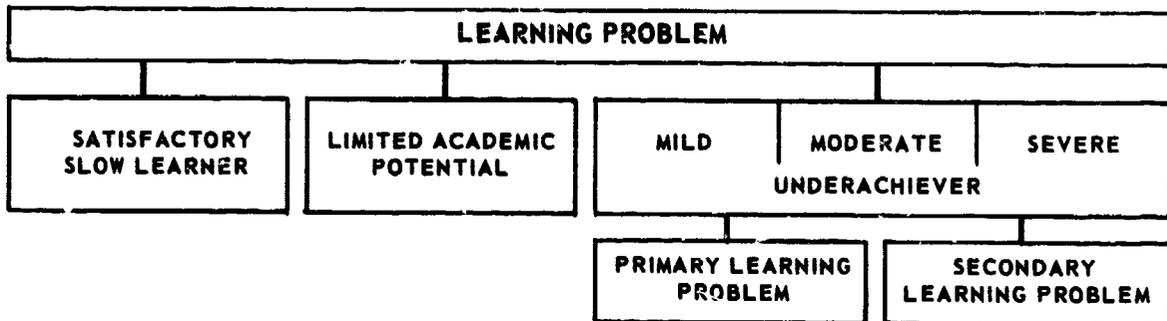
### WHAT ARE LEARNING PROBLEMS AND TO WHAT EXTENT ARE SUCH PROBLEMS EVIDENT AMONG JUVENILE DELINQUENTS?

Evidence linking crime and delinquency with learning problems has been accumulating at an expanding rate. Attempts to demonstrate this relationship have generally used the term "learning disabilities." We encountered variations in defining this term, ranging from a narrow, strict interpretation to a very wide categorization that includes any disorder which inhibits a youth from learning in accordance with his full ability and potential.

#### LEARNING PROBLEMS DEFINED

To determine the extent and significance of such academic deficiencies among adjudicated delinquents, our consultants tested a random sample of juveniles institutionalized in Connecticut and Virginia. Their test results showed a myriad of academic problems, any of which could be classified as a learning disability, depending upon the definition used. To recognize all of the academic deficiencies found, the consultants developed the term "learning problems" and broke it down into three main categories and two subcategories as follows: (The test methodology and terms are defined in detail in appendix I.)

#### CLASSIFICATION OF CHILD



The consultants defined juveniles as having learning problems if they were unable to perform in a satisfactory manner within 2 years of the grade level corresponding to their age. The consultants considered these juveniles to be in trouble and needing additional support in order to function adequately within an academic setting. Those who functioned 2 years or more below grade level were divided into three main categories.

1. Satisfactory slow learners--The consultants classified juveniles as satisfactory slow learners if they had a low average or slightly below average intellectual ability and were achieving within 2 years of the grade level expected for their ability, as opposed to their age.
2. Limited academic potential--The consultants classified juveniles as having limited academic potential if their current intellectual functioning was so low that they could not be expected to acquire skills above elementary school level. These juveniles had serious conceptual deficits, often accompanied by serious perceptual deficits. Some were evenly lagging in all areas of intellectual development, while others evidenced the striking discrepancies in functioning which, at a higher intellectual level, would suggest a learning disability. However, the juveniles placed in this category would be severely limited in their academic progress, even with excellent remedial instruction.
3. Underachievers--The consultants classified juveniles as underachievers if they had normal intelligence and were achieving 2 or more years below the level expected for their ability in one or more academic areas. The consultants considered a juvenile's underachievement as (1) mild if it was just about 2 years below the level of expectancy, (2) moderate if the deficit was greater than 2 years, but above the primary (first and second grade) level, or (3) severe if the juvenile had been unable to achieve basic skills in reading, written expression, or arithmetic. The severity of a given juvenile's underachievement was determined on the basis of his most serious skill deficit. The achievement of any given juvenile always reflects a variety of personal and social, as well as educational factors. Most of the adolescents in the test who showed signs of

having learning disabilities also had experienced the kinds of life situations that create secondary learning problems. For the purpose of this review, a juvenile showing signs of a learning disability was characterized as having a primary learning problem, even though secondary factors might have been present. Because of the presence of these secondary factors, underachievement could not be attributed solely to the severity of the learning disability. The consultants, therefore, measured the underachievement in terms of grade level and indicated whether or not a learning disability was present but did not specify the degree of correlation between learning disabilities and achievement.

a. Primary learning problem  
(learning disability)

The term "primary learning problem" (learning disability) refers to a demonstrated inability to perform a specific task normally found within the capability range of individuals of comparable mental capacity. It involves deficits in essential learning processes having to do with perception, integration, and verbal and nonverbal expression. Juveniles with learning disabilities generally demonstrate underachievement in one or more academic areas: oral language expression, reading, spelling and written expression, or arithmetic.

b. Secondary learning problem

Those underachieving juveniles who did not show the definitive signs of a learning disability were considered to have a secondary learning problem. The youngsters may have been relatively unsuccessful in acquiring academic skills because (1) their attendance did not allow for sufficient instruction, (2) serious familial or social problems prevented full attention being given to their educational development, or (3) emotional or behavioral difficulties interfered with their ability to profit from instruction.

HOW EXTENSIVE ARE LEARNING PROBLEMS  
AMONG JUVENILE DELINQUENTS?

On the basis of our test results in Connecticut and Virginia, academic deficiencies are extensive among the States' institutionalized juvenile delinquent populations.

Of the 129 juveniles tested in the two States:

--1 was found to be functioning at the grade level which corresponded to his age.

--33 (26 percent) were found to have primary learning problems.

--66 (51 percent) were found to have secondary learning problems.

--25 (19 percent) were classified as having limited academic potential.

--4 (3 percent) were classified as satisfactory slow learners.

The average age of the juveniles tested in Connecticut and Virginia institutions was 16.3 years and 15.6 years, respectively. However, these juveniles were functioning at about the 4th grade level in arithmetic and written expression and at about the 5th grade level in reading.

When the grade level expected for the age was compared with the functioning grade level of those juveniles with a primary learning problem, the disparity grew considerably. For example, juveniles in Virginia with a primary learning problem had an average age of 16.2 years and would have normally been placed in 11th grade classes. These juveniles were actually functioning at the 3.8 grade level in reading and arithmetic and at the 3.2 grade level for written expression.

The detailed results of our tests follow.

Compilation of Test Results  
Connecticut

	Total population tested	Primary learning problem	Percent of total	Secondary learning problem	Percent of total	Satisfactory learner	Percent of total	Limited academic potential	Percent of total	No problem	Percent of total
Males	53	17	32.1	27	50.9	-	-	8	15.1	1	1.9
Females	7	-	-	4	57.1	2	28.6	1	14.3	-	-
Total	60	17	28.3	31	51.7	2	3.3	9	15.0	1	1.7
Average age expected grade level	16.3	16.2	-	16.8	-	15.6	-	15.1	-	15.7	-
Average expected grade level for age	10.9	10.8	-	11.3	-	10.5	-	9.6	-	10.0	-
Average expected grade level for ability	8.1	7.9	-	9.5	-	6.7	-	4.0	-	11.0	-
Average functioning grade level for reading	5.6	3.7	-	7.2	-	6.5	-	2.6	-	12.0	-
Average functioning grade level for written expression	4.5	2.8	-	5.7	-	6.0	-	2.0	-	12.0	-
Average functioning grade level for arithmetic	4.4	4.1	-	4.7	-	5.7	-	2.7	-	10.0	-

Compilation of Test Results  
Virginia

	Total population tested	Primary learning problem	Percent of total	Secondary learning problem	Percent of total	Satisfactory learner	Percent of total	Limited academic potential	Percent of total	No problem	Percent of total
Males	53	10	18.9	27	50.9	2	3.8	14	26.4	-	-
Females	16	6	37.5	8	50.0	-	-	2	12.5	-	-
Total	69	16	23.2	35	50.7	2	2.9	16	23.2	-	-
Average age expected grade level	15.6	16.2	-	16.0	-	12.4	-	14.7	-	-	-
Average expected grade level for age	10.2	10.7	-	10.5	-	7.0	-	9.4	-	-	-
Average expected grade level for ability	7.1	7.2	-	8.4	-	4.3	-	4.3	-	-	-
Average functioning grade level for reading	4.9	3.8	-	6.7	-	3.0	-	2.4	-	-	-
Average functioning grade level for writing expression	4.0	3.2	-	5.3	-	3.0	-	2.0	-	-	-
Average functioning grade level for arithmetic	3.9	3.8	-	4.6	-	3.0	-	2.7	-	-	-

Several of the children our consultants tested illustrate the nature and extent of the problems.

--Bill is a 14-year-old Caucasian boy of average intelligence with normal speech, hearing, and vision. He has been known to the court since February 1975 for offenses, such as burglary, larceny, possession of marihuana, reckless driving, and running away from a court-ordered placement in a therapeutic school.

His father is described as a rigid, somewhat brutal individual who was a heavy drinker at the time of his marriage in 1958. He provided little emotional or physical support to the family, particularly when the eldest child (Bill's only sibling) was dying of leukemia. At that point he left the home and his present whereabouts are unknown. Bill's mother, a high school graduate, is described as a vacillating person who is heavily dependent on Bill and appears unable to make any firm decisions. She has been separated for 2 years from her present husband, largely because he and Bill could not get along.

Bill has had great difficulties in school since the first grade. Having been retained in two grades, he found himself in sixth grade considerably older than his fellow students. This, combined with a long standing reading problem and his inability to operate in a classroom situation, led to a referral to a local Child Development Center. When he was placed in the residential school and therapy program there, considerable progress was noted both in the academic and behavioral areas. He was described by his teachers as the classic high interest, low skill level student. He was unable to return to the Child Development Center in the fall of 1974, simply because he was older than the program would allow. His termination summary noted that:

"Bill is just beginning to find some success in a school environment and it has improved his approach toward his peers and adults. To remove this from him at this time would be drastic and will lead to ultimate failure educationally and socially. He has begun to trust people and deeply desires to be trusted by others. The approach must be a positive experience in order for Bill to achieve progress, and to push him into a regular classroom setting would be premature, and the results would probably be negative."

In spite of efforts to find another placement, it was necessary to return Bill to the public school system. This was met with a good deal of resistance on the part of school personnel and little effort was made to accommodate a specialized program for him. As late as mid-November, a school referral was not deemed necessary by the vice-principal because "Bill is no worse than several other students here, and we have no intention of referring them." It was in the following February that Bill had his first contact with the juvenile authorities.

The evaluation of Bill during our study indicated a boy of average intelligence with a primary learning problem affecting reading and writing. Although about to turn 15, Bill is still confusing look-alike words and losing his place when he reads. He reads beep for deep, was for saw, grand for parade. He sometimes writes n when he means m and changes letter order in words. Although his vision is adequate, his ability to translate what he sees is immature and, thus, he reverses letters and transposes letter order. The general result is an academic skill level ranging from second to fourth grade in a boy who is in the tenth grade. The need for a specialized program seems clear. The results of not having such a program in this case are equally clear.

--Gary, a 17-year-old black male, is a very proud and defensive young man. He sat with his shoulders held back and one arm thrown over the back of the chair. There was little background information available, and family issues were no longer primary, for he had for some years been with a street gang where he had apparently developed something of a following. Gary gave evidence of a strong feeling of responsibility for "his people," and he was likewise dependent upon their assistance in certain areas--reading, for example. In the institution where he was tested, he had been placed in a special group guidance program where he was getting some occasional assistance from his peers.

Gary's intelligence is sufficient for him to be considered in the normal range, although he would technically be called a "slow learner." He has much greater difficulty with verbal expression, however, than most other youngsters with a similar cultural background. His vocabulary and grammar are a bit below average, as might be expected, but he also has trouble expressing very common ideas and concepts.

He manages to be generally coherent but often struggles to express himself adequately to peers and teachers.

Gary has difficulty seeing the difference between letters that are similar (such as d, b, p, and q, or h, r, and n), and, thus, has trouble using sight vocabulary alone for reading. He confuses words such as show and snow and chill and cliff. Although he can make the fine sound discriminations necessary for learning to sound out words, he is very poor at blending these sounds together (e.g., to make beg from b-e-g). He is able to work his way through second grade reading material, but during testing when he read a third grade selection, he declared "No sense." Because of his generally low level of language skill, he is not as able to use the context to help him with unknown words as other students might be. Gary's spelling reflects the same difficulties, and he is able to put only the simplest thoughts in written form.

Gary is a bit more advanced in arithmetic. He can add and subtract, borrowing and carrying when need be, and can multiply by two digits. Sometimes he can divide correctly, but he frequently becomes confused and stops in the middle of an item. He has been relatively successful in seeing relationships between numbers, but it is hard for him to understand verbal instructions that would help him when he is frustrated.

Gary was very proud to be in the special program because of the status it gave. He had a room with curtains, not a cell. He faithfully attended the meetings "to see if you got any growth in you." He was pleased to be able to add to the simple words given to him on a spelling test the "big" words he had learned from a group mate through hard and repetitious practice--relationship, conversation, situation, and tolerate. Given his age, interests, and the severity of his difficulty, Gary will never go on for advanced education. The fact that he was voluntarily expending effort to learn these words which enhanced his self-esteem, however, made it seem likely that he would profit from further remedial instruction. He would have to be approached in a manner that would allow him to work on the most practical skills and still maintain his self-respect.

--Joe is a 15-1/2-year-old Spanish-surnamed youngster who has no physical disabilities and whose developmental history has been normal. He reports that he has always been bilingual, but feels that English is by far the stronger language, since he has spoken it for as long as he can remember and speaks Spanish only with his mother. His conversational English is fluent and unaccented.

Joe is the fifth of seven children and assumes a great deal of responsibility for supervising his younger brother. His father is "an abusing alcoholic" who has only marginal contact with the family. Joe's behavior at home is always cooperative and respectful, as expected in his ethnic group. Joe has worked with a youth corps program and contributed over half his salary to his mother. Unfortunately, the home situation has been rather unstable, with his mother and her common-law husband jailed recently on drug possession charges. The mother is also ill and under treatment for diabetes.

Court records indicate that Joe has gotten in trouble for fighting in the community and has a history of excessive truancy from school. His recent commitment to the detention center is for burglary. Joe's ninth grade transcript indicates that he was taking courses for low average students, such as English I, Basic World History, Math I, Art I, Earth Science, and Power Mechanics--all of which he failed because he did not attend classes. The transcript does not indicate whether he has ever had any sort of special education. The probation officer attributes Joe's poor school record to "low native intelligence and cultural lag."

Joe was friendly and cooperative with us and worked diligently during testing. He was able to persist, even when tasks were difficult for him, and was very responsive to instruction. Considering his severe academic limitations, his willingness to invest time and energy in a learning situation was rather remarkable. Aptitude tests indicated that Joe has average intellectual potential in a nonverbal situation. The tests showed he does not have "low native intelligence" but that he has "average native intelligence" with specific learning disabilities.

Although his nonverbal skills fall solidly in the middle of the average range, Joe's verbal skills are

borderline mentally deficient, no doubt because of many factors. His background certainly suggests heavy cultural deprivation. If he did not learn at school, his home provided him no support or encouragement. In addition, it was evident in testing that he has deficits in auditory memory. Since he could not retain a large proportion of the information which he heard, he could not use the resources of the school to compensate for the limited intellectual stimulation at home. However, he shows relative strength in practical social judgment--he knows how to handle social situations appropriately, within the realm of his experience.

Joe also shows deficits in visual perception, which severely hamper him in reading. He confuses the sequence of letters in words. Even after 10 years of school experience, he still reads form for from and saw for was. Directional confusion is evident in his writing where he has difficulty remembering how to form a d and confuses it with a b. In spelling he tends to confuse the sequence of letters in words, such as ligh for light. Some auditory perceptual problems are evidenced in very unphonetic spellings in which the sequence of sounds is very distorted. Although trying hard to sound out the words, he wrote crater for correct and erzot for result.

Joe is functioning at the second grade level in the language arts areas of reading, spelling and writing, although in arithmetic he functions at the fifth grade level. The relative strength of arithmetic over the written language skills is important. If this student's problems were merely poor motivation and repeated truancy, arithmetic would be the subject that would suffer the most, for arithmetic needs consistent practice and specific instruction. Students who have learned to read normally continue to be literate even if they do not attend school. It is common, however, to lose arithmetic skills if they are not used in daily life.

At this time there would certainly be no reason for Joe to attend school. It would be a waste of time for him to sit in classes where he would be expected to read at junior high level. The probation officer's assumption that Joe "probably can no longer benefit from a formalized education" is certainly correct if regular school programs are the only options. How-

ever, our experience with Joe suggested that he might considerably improve his reading and writing skills if he could have appropriate remedial instruction. The probation officer's attempts to help Joe find "appropriate employment" will not be very fruitful unless Joe can be educated to a level of functional literacy. In short, unless his learning disability is directly addressed, he has little hope of becoming a productive citizen.

Overall, the results of the testing in Connecticut and Virginia substantiate similar studies conducted in other States which also showed considerable academic underachievement in their delinquent populations. For example:

- 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.
- 90 percent of the girls tested in a Tennessee State reformatory were 2 to 7 years below their grade in reading.
- 70 percent of the delinquent youths tested in a Rhode Island study were found to have measurable disabilities significant enough to warrant professional attention.
- 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.

Recognizing that a large segment of the delinquent population in institutions has major learning problems, questions arise about the efforts of correctional systems to address this situation. How are juveniles with learning problems identified in the correctional systems? Do juvenile institutions address learning problems in their rehabilitation programs?

### CHAPTER 3

#### JUVENILE INSTITUTIONS FACE CERTAIN

#### CONSTRAINTS IN ADDRESSING LEARNING PROBLEMS

While academic education is considered an integral part of a youth's rehabilitation, changing the child's antisocial behavior is the institution's primary objective.

To meet the educational needs of a delinquent child, institutions face several constraints, including (1) the relatively short time a child is confined and (2) the severity of the child's problems, emotional as well as academic, that have been built up through successive years of failure. Where attempts have been made to meet the child's academic needs, however, the institutions either failed to perform the necessary diagnostic evaluations or, if such evaluations were made, trained teaching staffs were not available to interpret and follow the recommended teaching approach.

The juvenile correctional systems varied to some extent in the five States; however, the general goals and objectives of the systems were basically the same.

- Reduce crime and delinquency.
- Rehabilitate youths through care, supervision, treatment, education, and training.
- Develop the individual capability of each child.
- Research and study youths committed to the system.

Some factors considered in placing youths in correctional institutions were age, sex, maturity level, physical size, and aggressiveness.

Each of the States' correctional systems also place delinquents in group and foster homes, local and community detention centers, and various other facilities.

#### EMPHASIS ON CHANGING ANTISOCIAL BEHAVIOR

While the continued education of a delinquent child is considered important, the primary objective of the correctional systems is to change the child's behavior patterns. Correction officials stated that the children were committed because their behavior brought them into conflict with society and, therefore, the institution must try to change these

behavior patterns before fully addressing the child's educational needs.

To illustrate this emphasis, improvement in behavior is the primary factor used when considering a child for release from the institution. For example, in Connecticut youths committed for serious offenses, such as rape, murder, armed robbery, assault, and arson, must pass through five levels of behavior improvement--freshman, sophomore, junior, senior, and release eligible. Promotion from one level to the next is dependent upon two factors: (1) time (1 month as a freshman and 2 months for each of the four remaining levels) and (2) meeting the behavior improvement objectives established within each of the levels.

The Texas system is very similar to Connecticut's. Although the programs and exact requirements varied in the other States, the main emphasis was on behavior improvement.

For example, in Colorado a decision to release a child from an institution is based primarily on the judgment of the professional staff, using as the primary consideration the extent to which the child has properly behaved. The State's basic program for developing acceptable behavior addresses the different reasons why various children demonstrate anti-social behavior and recommends different treatment alternatives so the youth "will not get deeper and deeper into a cycle of delinquent behavior." Each treatment program consists of four major elements.

- A treatment schedule of predictable consecutive treatment phases.
- Treatment goals and objectives.
- Suggestions for placement alternatives.
- Recommended worker roles for such individuals as therapists, teachers, and peers.

#### FACTORS PREVENTING INSTITUTIONS FROM EFFECTIVELY REMEDIATING LEARNING PROBLEMS

According to correction officials, even if they were to place additional emphasis on education, including the remediation of learning problems as opposed to behavior modification, two interrelated factors would inhibit the effort: (1) the extent and severity of the delinquent's learning problem

and (2) the relatively short period of time the child is institutionalized.

The educational diagnostic tests administered by our consultants in Connecticut and Virginia documented the extent and severity of the juveniles' learning problems. Virtually 100 percent of the juveniles tested were significantly behind academically in relation to their age and ability levels. For example, the average age of the delinquent population tested was about 16 years. The test results, however, showed that these children were, on the average, functioning at about the fourth to fifth grade level academically.

Correction officials also stated that, by the time the juvenile has reached the institution, the problem has been magnified in that the youth (1) has usually experienced several years of failure in school, (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.

The second factor is the relatively short period of confinement of the children as shown by recent statistics (mostly 1974) readily available from the institutions visited.

<u>State</u>	<u>Number of institutions</u>	<u>Range of average period of confinement</u>
California	3	10 to 11 months
Colorado	4	6 to 9 months
Connecticut (note a)	4	4.3 months--juveniles 10 months--adults, ages 16, 17, and 18
Texas	4	6 to 8 months
Virginia	7	6 to 13 months

a/In Connecticut, youths 16 to 18 were treated as adults, whereas in the other States they were considered juveniles.

After reviewing the situations in the institutions in Connecticut and Virginia, our consultants believed that total remediation of the types and seriousness of the learning problems evidenced by the tested children was not likely, given the short time the juveniles were confined.

The consultants felt, however, that for some of the children the time spent in the detention center was the best opportunity they had had for a concentrated educational experience.

Recognizing the constraints under which the institutions must operate, improvements could be made in identifying and treating learning problems. Although State correctional institutions attempt to meet the delinquents' educational needs, we were told that either the necessary detailed diagnostic evaluations needed to determine a child's specific problems were not performed or, if they were, the prescribed recommendations were not received by the teachers or the teaching staffs were not adequately trained to implement or interpret the recommendations.

### Failure of institutions to either use or perform diagnostic evaluations

A child committed to a juvenile correctional system is first sent to a reception center. The reception center (1) conducts initial tests, (2) reviews the child's prior history, (3) introduces the youth to life in the institution, and (4) decides on the placement and rehabilitation program. Depending on the State, initial testing ranged from a few basic academic achievement tests to an extensive diagnostic evaluation. In Colorado, Texas, and Virginia, we were told that each child was given certain basic tests, including academic achievement, psychological, and medical tests. Based on the initial series of tests, additional indepth testing was performed if, in the opinion of the diagnostician, such testing was warranted. The three States, however, differed in the uses made of the test data.

For example, in Virginia the data was used to produce a needs assessment for each child. The needs assessment defined the emotional, behavioral, and educational problems of the child and recommended a treatment program to address each of the areas. The assessment, along with the recommendations, were forwarded to the institution where the child was placed. However, there was no assurance that the information was transferred to the institution school or received by the child's teachers.

For example, the school principal at one of the seven institutions stated that diagnostic evaluations were not available to the school staff when the child was enrolled. Information which usually accompanied the child consisted of prior academic records, when available, and achievement test results administered at the reception and diagnostic center. These were used to determine grade placement. Correction officials, including the superintendent of the institutional school system, acknowledged this situation and stated that corrective action was being taken.

In Colorado the tests identified the specific learning problems and an educational prescription was written; however, school officials at the institutions stated that the teaching staffs were unable to understand or follow the prescriptions.

California and Connecticut used a different testing approach. We were told that educational evaluations were generally limited to a series of academic achievement tests which were used to determine only the child's grade functioning level.

Connecticut correction officials stated that no indepth educational evaluations were made because the institution was not authorized to employ a tester and existing staff was not qualified to administer or interpret such tests.

In California we were told tests that might show the extent of a child's learning problems were given only on a selected basis. This additional testing was conducted on only those who had scored low on tests administered in a federally funded education program (Elementary and Secondary Education Act, title I). The testing was performed only at the discretion of the psychologists. Educational recommendations were then prepared and sent to the children's teachers, but no other actions were taken.

Lack of adequately trained teaching staffs

Even if initial testing provided accurate identification of learning problems, the institutions lacked special education teachers trained to help children overcome such problems. Of the 353 teachers in the institutions visited, only about 6 percent were certified in special education. <sup>1/</sup>

<u>State</u>	<u>Total teachers</u>	<u>Certified</u>	
		<u>Number</u>	<u>Percent</u>
California	119	3	3
Colorado	32	3	9
Connecticut	32	1	3
Texas	96	9	9
Virginia	<u>74</u>	<u>5</u>	7
	<u>353</u>	<u>21</u>	5.9

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<sup>1/</sup>Certification is not the only measure of a teacher's ability to effectively deal with learning problems, but it is a readily available measure that does not involve having to specifically observe each teacher's performance to judge his or her ability.

The random testing of delinquents for learning problems conducted by the consultants in Connecticut and Virginia showed that 28 and 23 percent, respectively, of the institution population had primary learning problems. An additional 15 and 23 percent, respectively, were classified as having limited academic potential. In the Nation's public school systems, all of these children could be classified as handicapped and, therefore, would qualify for special education programs taught by certified special education teachers.

Not only are special education teachers in short supply, but, according to appropriate officials in all five States, the regular classroom teachers generally are not trained in how to recognize or evaluate a juvenile's learning problem or which teaching methods and techniques should be used in attempting to remediate such problems.

In the Connecticut and Virginia institutions, we interviewed 58 teachers of juveniles who were tested by our consultants and were found to have a primary learning problem. In 78 percent of the interviews, the teachers were unaware that these children had such problems.

As shown in the following table, in 33 percent of the interviews (19 of 58), the teachers attributed the juveniles' poor academic performance to such factors as lack of motivation or a bad attitude.

Factors Which Teachers Believed  
Caused Academic Difficulty

<u>Reason</u>	<u>Number of interviews in which mentioned</u>
Lack of motivation and poor attitude	6
Immaturity and lack of social skills	4
Low self-image	2
Emotional problems	3
Other (low I.Q., slow learner, lazy, poor home)	<u>4</u>
Total	<u><u>19</u></u>

For example, one teacher said that a particular juvenile was "just plain lazy." Our consultant's tests showed that the juvenile had a severe primary learning problem (a language disability in both understanding others and verbal expression).

In the five correctional systems reviewed, 94 percent of the officials interviewed believed that there is a possible relationship between learning problems and juvenile delinquency. They indicated that, while other factors contributed toward delinquency, such as poor home environment, lack of close family relationships, and cultural and economic deprivation, learning problems can be considered one of the primary contributing factors. Eighty-five percent of the officials questioned believed that adolescent learning problems can be remediated, but that the earlier a learning problem is identified, the easier it is to treat.

Finally, 89 percent of the correction officials questioned believed that identifying and treating learning problems early in school could be an effective method of helping to prevent juvenile delinquency.

Considering the apparent inability of juvenile institutions to remediate learning problems and the opinions of both correctional officials and our consultants on the need for early identification and treatment of such problems, the question arises: What efforts are being made by the Nation's public school systems to identify and treat learning problems early in a child's life?

## CHAPTER 4

### PUBLIC SCHOOLS NEED TO IDENTIFY AND TREAT CHILDREN WITH LEARNING PROBLEMS

The Nation's public schools are not adequately identifying or providing the necessary educational programs to treat all children with either primary or secondary learning problems. In all States visited, there were children in the classrooms who were

- having academic difficulties but were waiting to be referred for testing;
- waiting to be tested; or
- having been tested and found to have a learning problem, were waiting to be placed in a special program.

Thus, children can be caught up in a cycle of academic failure and frustration, which may be one of the major contributing factors to the growing delinquency problem.

### LIMITED COMMITMENT BY THE STATES TO IDENTIFY AND TREAT CHILDREN WITH LEARNING PROBLEMS

Education officials in the five States generally agreed that there is a possible relationship between learning problems and juvenile delinquency, and that the key to successful remediation or compensation of such problems is early identification and treatment. The States' commitment to meet the needs of children with learning problems, however, has been limited. The emphasis at the State level has generally been on the needs of children with primary learning problems. This emphasis has been provided through special education for the handicapped programs. The States' efforts to identify and provide program services for children with secondary learning problems have been minimal.

### State mandates pertaining to children with primary learning problems

The "special education" legislation in each of the five States mandates that the State boards or departments of education, in cooperation with local school divisions, plan and implement special education programs for all children identified as having handicapped conditions. Listed among the handicaps in all States except California are learning disabilities which correspond to our consultant's definition

of a child with a primary learning problem. California's legislation mandates programs only for physically handicapped, mentally retarded, and autistic children.

The specific State mandates, the estimated number of children with primary learning problems, and the estimated number of children served in the five States during school year 1974-75 are shown in the following table.

State Commitment to Children  
with Primary Learning Problems in 1974-75

<u>State</u>	<u>State mandate</u>	<u>School-aged population</u>	<u>Estimated number of school children with primary learning problems</u>	<u>Percentage of population</u>	<u>Estimated number of school-aged children with primary learning problems served in 1974-75</u>
California	No mandate for children with primary learning problems	4,500,000	90,000	2.0	75,060
Colorado	Treat all children identified--no age requirement	550,000	33,500	6.1	15,300
Connecticut	Identify and treat all children 5 to 21 years old	640,000	23,600	3.7	18,900
Texas	Identify and treat all children 3 to 21 years old (note a)	2,850,000	153,000	5.4	119,200
Virginia	Identify and treat all children 2 to 21 years old (note b)	<u>1,100,000</u>	<u>29,500</u>	2.7	<u>15,000</u>
Total		<u>6,440,000</u>	<u>329,600</u>	3.4	<u>244,000</u>

a/The State mandate is to be fully implemented in school year 1976-77.

b/The State plan is to be fully implemented in school year 1976-77.

The percentage of children estimated to have primary learning problems varied among the five States from a high of 6 percent of the school population to a low of 2 percent. The differences in the estimated percentages used by the States were attributable to (1) State funding limitations on the number of children that could be classified as having primary learning problems, (2) using a percentage cited by the Department of Health, Education, and Welfare as being indicative of the national prevalence rate, or (3) the States' own assessment of needs.

HEW has estimated the prevalence of primary learning problems among the Nation's school-aged population to be between 1 and 3 percent. However, in March 1975 testimony before a House Appropriations Subcommittee, the Acting Deputy Commissioner for Education of the Handicapped said that

"\* \* \* we have been only claiming that 1 percent of children were learning disabled while our latest studies are showing 6 and 7 percent. Now we are going to go to about 2 and 3 percent, still focusing on the most severely handicapped."

In support of the 6 percent figure cited by the HEW official, Colorado in 1972 conducted a statewide study which showed that about 6 percent of the school population in the State had learning disabilities (primary learning problems).

When using the 6-percent rate and comparing it to the current estimated rates used by the five States, the number of children that may require a primary learning problem program increases considerably, as shown by the following table.

Comparison of Numbers of Primary Learning Problem Children Estimated and Served

State	Total school-age population 1974-75	Current State estimate of school-age children with primary learning problems		Number of primary learning problem children based on approx. 6 percent prevalence rate	Number of primary learning problem children served in 1974-75	Percentage of children served	
		Total	Percent of population			Based on current State estimate	Based on 6 percent prevalence rate
California	4,500,000	90,000	2.0	270,000	75,600	84	28
Colorado	550,000	33,500	6.1	33,000	15,300	46	46
Connecticut	640,000	23,600	3.7	38,400	18,900	80	49
Texas	2,850,000	153,000	5.4	171,000	119,200	78	70
Virginia	1,100,000	29,500	2.7	66,000	15,000	51	23
Total	<u>9,640,000</u>	<u>329,600</u>	3.4	<u>578,400</u>	<u>244,000</u>	74	42

These figures show that the States we visited were serving 74 percent of primary learning problem children, based on

their current estimates of such problems. The average estimated prevalence rate, however, was only 3.4 percent, which is well below the 6-percent figure cited by the HEW official and the Colorado study. Based on the 6-percent rate, the five States were serving only 42 percent of the primary learning problem children in school year 1974-75.

### State commitments to children with secondary learning problems

Although State mandates generally require treating all children with primary learning problems, no similar requirements exist for children with secondary learning problems.

The major effort for children with secondary learning problems appears to come from the title I program funded under the Elementary and Secondary Education Act (ESEA) of 1965, as amended. This program generally provides remedial reading, language arts, and mathematics classes, which attempt to teach educationally deprived children school material at a slower rate. However, the program is concentrated in low-income area schools and, therefore, is not available to those children attending schools outside of these areas.

Three States--California, Connecticut, and Virginia--also have remedial programs of their own available to all school districts. However, their impact is generally limited to serving a specific grade or grades and a relatively small percentage of the total school population.

In Virginia the State remedial classes were only available to fifth grade students in the 1974-75 school year who scored below the 50th percentile on national achievement tests as fourth graders. Entrance into the program was determined by comparing ability and achievement scores and selecting students whose scores showed the greatest disparity. The State general assembly, however, failed to fund the program beyond the 1975-76 school year.

California's Miller-Unruh program provides remedial reading assistance to children in first through third grades by hiring reading specialists. Program eligibility is determined through standardized reading tests. Children who score below the 50th percentile and who have demonstrated the greatest educational need are given priority. Program funding levels for school year 1974-75 were set at \$15 million.

Connecticut's Compensatory Education program focuses most of its resources in kindergarten through grade six by providing remedial reading and math instruction to children whose

educational achievement is restricted because of economic, linguistic, or environmental isolation.

In school year 1974-75, title I and the State remedial programs served the following numbers of children:

Children in Remedial Classes  
1974-75

<u>State</u>	<u>ESEA title I number of children</u>	<u>State programs</u>	
		<u>Number of children</u>	<u>Cost</u>
California	489,300	a/124,700	\$15,350,000
Colorado	35,400	-	-
Connecticut	41,523	35,354	6,500,000
Texas	437,300	-	-
Virginia	<u>107,000</u>	<u>b/17,200</u>	<u>5,063,000</u>
Total	<u>1,110,523</u>	<u>177,254</u>	<u>\$27,013,000</u>

a/Limited to first through third grades.

b/Limited to fifth graders in 1974-75 and fifth and sixth graders in 1975-76. Virginia's program terminates after the 1975-76 school year.

SCHOOL DISTRICTS' COMMITMENTS VARIED IN  
SERVING LEARNING PROBLEM CHILDREN

Although the school districts are entrusted with implementing the State programs for children with learning problems, their commitment to serve these children varied from meeting the State requirements to no programs at all. Where they existed, special education programs designed to serve children with primary learning problems were generally structured in accordance with the State's special education guidelines. Because there are no State mandates to identify and serve children with secondary learning problems, the districts generally had no uniform plans for addressing these needs.

Programs for children with  
primary learning problems

State education laws place the responsibility for implementing special education programs on the school district. Generally the school districts establish and oversee the programs for proper testing, diagnosis, and placement.

We visited 23 districts to determine the number of children with primary learning problems being served. They represented a range of income, urban, suburban, and rural factors in each State and were generally regarded by State officials as representative of the States' school districts. The number of children served in proportion to the student population during school year 1974-75 were:

Schedule of Children Served in 1974-75  
School Year With Primary Learning Problems

<u>State</u>	<u>Number of districts visited</u>	<u>District student population</u>	<u>Number of children in the district served</u>	<u>Percentage of student population served</u>
California	3	169,400	3,400	2.0
Colorado	3	96,300	2,100	2.2
Connecticut	9	55,700	2,200	3.9
Texas	3	49,000	4,100	8.4
Virginia	<u>5</u>	<u>207,300</u>	<u>3,700</u>	1.8
Total	<u>23</u>	<u>577,700</u>	<u>15,500</u>	2.7

Although these statistics show a variance in the percentage of children served among the States, the disparities between the school districts within the States were more significant. The extent of primary learning problem services appeared to be directly related to the amount of resources allocated by the districts for these programs, with the affluent districts able to provide more funds, diagnosticians, and special education teachers.

- The more affluent school district selected in Virginia served about 2.0 percent of the population as compared to a low-income, rural, and sparsely populated district that had no services at all because it found the programs too expensive.
- In Colorado the most affluent of the three districts selected served about 6 percent of the school-aged population, while the larger, less affluent, urban district served only about 1.5 percent.
- In Texas the upper income suburban area served about 9.5 percent of its school-aged population in its primary learning problem programs, while the urban district with a majority of low-income families served only about 5 percent.

--State officials in Connecticut said that the more affluent districts in their State are able to do a better job in implementing the special education laws, while poorer localities are unable to respond as effectively.

### Programs for children with secondary learning problems

The title I ESEA low-income program appeared to be the principal remedial service offered in the districts, although some districts had State and/or district remedial reading and mathematics specialists to serve academically deficient students. These specialists, however, usually taught only in the elementary grades and were generally not sufficient in number to serve all schools within the district. Other alternative educational programs were also offered in some districts to assist children who were not advancing in the regular classroom setting. These programs generally emphasized vocational training and operated in the secondary schools.

### LOCAL PUBLIC SCHOOLS LACK RESOURCES TO IDENTIFY AND SERVE ALL CHILDREN WITH LEARNING PROBLEMS

At the local public school level, the full impact of the problem becomes apparent. There were children in the classrooms with academic problems who were

--waiting to be referred for testing;

--waiting to be tested; or

--having been tested and found to have a learning problem, were having to wait to be placed in a program because of the limited resources available.

### Teacher estimates of need

To gain perspective on the number of children with learning problems who may need special education or remedial services, we visited 80 schools and interviewed 373 teachers about their 1974-75 classes' performance. Although teachers were able to cite how many children in their classes had academic difficulties, they were unable to identify whether the children had primary or secondary learning problems. (Problem identification generally requires an extensive multidisciplinary diagnostic evaluation.) However, as teachers were generally cited as a first step in the identification

and referral process for both special education and remedial classes, we considered their estimates of the number of children requiring evaluation to determine the need for such services to be generally reliable. Their estimates were as follows:

Results of Interviews With Teachers  
Concerning Learning Problem Children  
School Year 1974-75

	<u>No. of teachers</u>	<u>No. of children taught</u>	<u>No. of children with academic problems</u>	<u>No. of children referred for testing</u>	<u>No. of children found to have a learning problem</u>	<u>No. of children placed in a program</u>	<u>No. of children awaiting placement</u>
California	75	4,799	727	556	346	176	170
Colorado	70	5,501	1,109	582	467	306	161
Connecticut	64	2,376	655	514	412	266	146
Texas	52	1,884	370	286	286	256	30
Virginia	<u>112</u>	<u>7,383</u>	<u>1,814</u>	<u>1,028</u>	<u>936</u>	<u>516</u>	<u>420</u>
Total	<u>373</u>	<u>21,948</u>	<u>4,675</u>	<u>2,966</u>	<u>2,447</u>	<u>1,520</u>	<u>927</u>

An analysis of the above schedule shows that

--21 percent of the children were estimated to have academic problems,

--only 63 percent of the children with academic problems were being referred for testing and evaluation,

--82.5 percent of the children who were referred and tested were found to have an academic problem significant enough to warrant a special program, and

--only 62 percent of the children identified as needing a special program were placed.

In a hypothetical class of 100 children, the teachers' figures indicated that

--21 of 100 children have academic problems,

--only 13 of the 21 would be referred for testing,

--11 of the 13 would be identified as needing a special or remedial class, and

--only 7 of the 11 would be placed in such a class.

Teachers' reasons for not referring children for testing and evaluation

The reasons most frequently cited by teachers for not referring children suspected of having learning problems for testing and evaluation were:

<u>Number of teachers</u>	<u>Reasons</u>
38	No program was available.
31	The students' problems were not severe enough to either qualify or be placed.
26	Existing programs were full.
18	The students' problems could be handled in class.
12	The students' problems were recognized too late in the year to refer for evaluation.
12	Not enough diagnosticians available; the testing was backlogged.

The following example illustrates the reasons cited above and highlights the shortfall of services available.

Nine teachers in one elementary school who taught in the kindergarten through sixth grades estimated that 100 of the 286 children they taught (35 percent) had academic problems. Of the 67 children they referred for testing, 54 had learning problems. Only 11 of these children were placed in special education or remedial programs.

The reasons cited by the teachers for not referring the 33 children for testing were:

<u>Number of children</u>	<u>Reason</u>
5	No remedial class available.
5	Not considered severe enough to refer.
2	Tested previously--not placed.
13	Testing time not available and programs were full.
6	No reason given.
<u>2</u>	Left district.
Total <u>33</u>	

The teachers stated that the 43 children tested and found to have learning problems were denied programs primarily because there was either a lack of space in existing programs or no classes were available.

As previously noted, the classroom teachers we interviewed indicated that 21 percent of their students had academic trouble. Generally, though, the teachers could not determine whether the children had a primary or secondary learning problem. Moreover, they only referred 63 percent of the children. Thus, the teachers had to make some subjective judgments as to which children to refer. In many cases, undoubtedly, those children most in need were probably referred. In other cases, however, it may have been those children who somehow commanded attention.

## CHAPTER 5

### LIMITED FEDERAL INVOLVEMENT IN IDENTIFYING AND TREATING CHILDREN WITH LEARNING PROBLEMS

The Federal Government's involvement in identifying and treating learning problems has come primarily from the Office of Education, Department of Health, Education, and Welfare, through its programs funded under various provisions of the Education of the Handicapped Act, as amended (20 U.S.C. 1401), and the Elementary and Secondary Education Act of 1965, as amended (20 U.S.C. 241a).

The Law Enforcement Assistance Administration, through State criminal justice planning agencies, has funded projects which, as part of their operations, identified and/or treated learning disabilities (primary learning problems). However, LEAA had no overall policy or emphasis regarding identifying and treating learning problems.

#### HEW POLICIES AND PROGRAMS

Although several Federal education assistance programs may benefit children with learning problems, funds provided to the States under the Education of the Handicapped Act, as amended, and title I of the Elementary and Secondary Education Act of 1965, as amended, were the primary Federal resources used by the public schools to meet the educational needs of these children.

#### Education of the Handicapped Act

According to HEW, the Government's commitment for educating the handicapped is not intended to provide complete per child costs, but to bring about changes in educational patterns by initiating demonstration and model programs and by encouraging innovative techniques and practices.

Under part B of the Education of the Handicapped Act, as amended, (20 U.S.C. 1411) grants are provided to the States to assist in initiating, expanding, and improving programs and projects for the handicapped at the preschool, elementary, and secondary levels.

To receive grants under part B, each State education agency must submit a plan (1) outlining its policies and procedures for educating handicapped children and (2) describing the activities which the State proposes to carry out with the Federal grant funds.

In fiscal year 1975 approximately \$100 million was provided to the States under this part of the act. HEW estimates that about \$10.6 million was used for programs for children with primary learning problems.

Under part G of the act (20 U.S.C. 1431), grants and contracts are awarded on the basis of national competition to institutions of higher education, State and local education agencies, and other public and private educational and research agencies or organizations to carry out programs dealing with specific learning disabilities (primary learning problems). The program seeks to stimulate State and local provision of comprehensive identification, diagnostic, prescriptive, and education services for all children with primary learning problems through the funding of model programs and supportive technical assistance, research, and training activities.

In fiscal year 1975 about \$3.25 million was awarded for operating 29 model centers for children with primary learning problems.

#### Education for All Handicapped Children Act of 1975

On November 29, 1975, the Education for All Handicapped Children Act of 1975 (89 Stat. 773) amended part B of the Education of the Handicapped Act. The act:

- Provides for an individualized education program tailored to the unique needs of a handicapped child.
- Sets priorities for providing services to handicapped children.
- Provides that children will not have to be denied services because of inability to pay.
- Strengthens procedural safeguards relating to identifying, evaluating, and placing handicapped children.

The Government will pay an increasing percentage of the cost of educating handicapped children over a 5-year period, starting with 5 percent in fiscal year 1978 and increasing to 40 percent in fiscal year 1982.

For funding purposes, however, no more than 12 percent of the children aged 5 to 17 may be classified as handicapped, and no more than 2 percent may be classified as learning disabled.

The act also requires that the Commissioner of Education prescribe regulations which (1) establish specific criteria for determining whether a learning disorder or condition may be considered a specific learning disability and (2) describe diagnostic procedures to be used in determining whether a child should be designated as learning disabled. If, as a result of publishing the regulations, the Commissioner determines that changes are necessary in the definition of the term "children with specific learning disabilities," he shall submit recommendations to the Congress for changes in the legislation.

With the passing of this act, the responsibilities of the Government were expanded, as the law mandates that the States develop plans and procedures to provide a free appropriate education to all handicapped children ages 3 to 18 by September 1, 1978. The Government is to assist the States in developing and implementing these plans and determine whether the States are complying with them.

#### Elementary and Secondary Education Act of 1965

Title I of the Elementary and Secondary Education Act of 1965, as amended, provides Federal financial assistance for programs designed to meet the special educational needs of educationally deprived children <sup>1/</sup> living in areas with high concentrations of children from low-income families. The funds are provided to State educational agencies which make grants to local educational agencies. (Funds are also provided to State agencies under title I for educational programs for neglected or delinquent children, children of migrant families, and handicapped children.)

Of the \$1.9 billion appropriated for the title I program in fiscal year 1975, about \$1.6 billion was used to support a variety of programs planned and operated by local school districts. These programs emphasized reading, language arts, and mathematics.

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<sup>1/</sup>Title I regulations define educationally deprived children as children who need special educational assistance to perform at grade levels appropriate for their age. The term includes children with special educational needs due to poverty, neglect, delinquency, and handicaps or to cultural, economic, and linguistic isolation from the general community.

To participate in the program, States are required to submit applications to the Office of Education for review and approval. The State education agency is required to insure that it will administer the program in accordance with the act and program regulations. The State education agencies' major responsibilities are to

- approve or disapprove applications submitted by local education agencies after determining whether the proposed projects comply with the intent of title I,
- make certain that title I funds are used only for approved projects, and
- adopt fiscal control and accounting procedures to insure that Federal funds are properly disbursed and accounted for

The local education agencies are responsible for (1) determining school areas eligible for participation, (2) identifying the educationally deprived children in these areas, (3) determining their special needs, (4) developing projects responsive to the priority needs of these children, (5) adopting procedures for evaluating the effectiveness of major project activities, and (6) carrying out the projects in accordance with their approved application and program regulations.

#### LEAA POLICIES AND PROGRAMS

Currently, LEAA has no overall policy on identifying and treating learning disabilities or other types of learning problems as a means of reducing or preventing juvenile delinquency.

LEAA, pursuant to the Juvenile Justice and Delinquency Prevention Act of 1974 (42 U.S.C. 5601), is responsible for implementing overall Federal policy and developing objectives and priorities for all Federal juvenile delinquency programs and activities relating to prevention, diversion, training, treatment, rehabilitation, evaluation, research, and improvement of the juvenile justice system.

To assist it in determining the relationship of learning disabilities to juvenile delinquency and in developing its programmatic directions, LEAA's Office of Juvenile Justice and Delinquency Prevention awarded a grant to the American Institutes for Research in December 1975 to (1) conduct

a search of all literature dealing with the relationship of all learning disabilities to juvenile delinquency, (2) develop an inventory of demonstration projects, and (3) determine current theory and practice through discussions with learning disabilities experts.

In its April 1976 report to LEAA, the American Institutes for Research concluded that the existing literature did not firmly establish or disprove a relationship between learning disabilities and juvenile delinquency. The study cited various problems with the existing literature, including:

- The absence of adequate studies comparing the incidence of learning disabilities between delinquent and nondelinquent populations.
- The absence of studies comparing the development of a set of learning-disabled children and a comparable set of non-learning-disabled children.
- Definitional, diagnostic, procedural, analytic, and presentational problems which preclude deriving an estimate of the incidence of learning disabilities from the existing studies.

Nonetheless, it concluded that even though most of the quantitative studies can be criticized for not grappling with learning disabilities as such, they persistently suggest a pattern of learning handicaps and that something is present which deserves systematic investigation.

The report also identified 52 projects and programs funded by LEAA from fiscal year 1972 through fiscal year 1975 which either diagnosed or treated learning disabilities as part of their operation, but noted that the projects added very little to LEAA's understanding of learning disabilities and juvenile delinquency.

The American Institutes for Research made the following recommendations to the Office of Juvenile Justice and Delinquency Prevention.

- The Office should take no action on grant applications related to learning disabilities until a program strategy has been prepared and announced.
- The Office's interest in learning disabilities should fall in the research and evaluation sector, not in program applications.

With respect to the second recommendation, the study states:

"Learning disabilities and related learning handicaps are phenomena of potential importance to the Office, and every effort should be made to insure that money is directed toward learning about them. This does not exclude demonstration projects; on the contrary, evaluation of a few carefully designed demonstrations could help answer some basic questions. But the appropriate time for broad applications is still in the future."

The report points out that doing research and operating demonstration projects depends heavily on the Office's policy priorities and resources and suggests four options. Two of them could be funded independently by the Office and the other two are appropriate for interagency collaboration. The first was a relatively small effort to determine the incidence of learning handicaps, including learning disabilities strictly defined, among a few basic populations, such as the chronic juvenile offender, the first offender, and the non-delinquent.

The second effort was a demonstration project to test the value of diagnosing and treating learning disabilities as an aid to rehabilitating serious juvenile offenders.

The first of the suggested collaborative efforts is a national inventory of learning handicaps among youth, which would permit profiles of critical populations and age groupings. This would include information on a wide variety of vulnerable youth populations that is necessary for the Office's responsibilities for prevention programs and could complement education's needs.

The second effort would be a demonstration project to identify and treat learning disabilities in an inner-city elementary or preschool, with thorough followup research. Such a study might show that learning disabilities could have much more potent effects when it occurs in an inner-city environment with parents who may have never heard of learning disabilities than when it occurs in a suburb with parents who are aware of learning disabilities. Findings about what happens when learning disabilities are found and treated early in the high-risk inner-city environment could have high utility for shaping delinquency prevention strategies.

The Office is planning an initiative for fiscal year 1977 to focus on remediating learning disabilities. It plans

to incorporate two of the above recommendations into its program: (1) that specific populations be tested for the incidence of learning disabilities and (2) that a few carefully designed demonstration programs aimed at preventing or reducing delinquency through remediating learning disabilities be established and evaluated.

The program initiative is to consist of the following steps:

1. Testing three populations (nondelinquents, probationers, and institutionalized juveniles) in representative parts of the country for the incidence of learning disabilities.
2. Establishing demonstration programs in geographical areas and for target populations where the incidence of learning disabilities appears to be significant.
3. Researching the effectiveness of the treatment programs for remediating learning disabilities and preventing or reducing delinquency.

## CHAPTER 6

### CONCLUSIONS, RECOMMENDATIONS, AND

#### AGENCY COMMENTS

#### CONCLUSIONS

Our test results in Connecticut and Virginia, as well as other studies, have shown that learning problems are extensive among institutionalized juvenile delinquents.

#### Primary learning problems

Twenty-six percent of the delinquents tested in Connecticut and Virginia had primary learning problems. Whether such problems directly cause children to turn to delinquency is not evident. However, the education system needs no mandate in terms of preventing or reducing juvenile delinquency to address primary learning problems.

In the five States we reviewed, most children with primary learning problems are entitled to an adequate education under the States' educational laws. We believe the legislative framework--Federal and State--and organizational framework exists for the schools to improve the identification and treatment of primary learning problems. But the States and the Department of Health, Education, and Welfare have not developed adequate procedures to identify all children with such problems. Our work indicates that the States and HEW may have underestimated the number of children with primary learning problems. As a first step toward providing adequate education to such children, HEW and the States need to identify those children in need of help. Then, adequate referral and testing processes and special education programs need to be established.

What can the juvenile institutions do? Given the constraints on the institutions in terms of the severity of the juveniles' problems, the emphasis on changing the juveniles' antisocial behavior, and the short period of their confinement, the positive impact that institutions can have on correcting the juveniles' learning problems may be limited. This situation, however, does not mean that the institutions and juvenile correction systems could not better manage their resources. For example, what good does it do to extensively test juveniles at a diagnostic center if the information either is not sent to the institution or, once sent, is not used? Appropriate State officials should consider how to develop more effective institutional programs that capitalize on such test results.

To what extent, if any, and in which ways do primary learning problems generate, precipitate, and/or contribute to delinquent behavior? Completed studies so far have not answered such questions. The extent of primary learning problems among institutionalized delinquents, at a minimum, suggests that we need to know more about this relationship and how to effectively deal with it.

Until a determination is made concerning the nature, extent, and direction of the relationship (if any) between primary learning problems and juvenile delinquency, we do not believe extensive Federal resources should be committed to address the problem of juvenile delinquency through the early identification and treatment of primary learning problems. However, if a positive relationship were to be established and the nature and extent of such a relationship were known, the Law Enforcement Assistance Administration and HEW could consider placing more emphasis on ameliorating primary learning problems as one additional means of addressing the problem of juvenile delinquency. Under the Juvenile Justice and Delinquency Prevention Act of 1974, LEAA may assist in developing budget requests of Federal agencies that are, or could be, related to juvenile delinquency prevention or control and recommend to the White House changes to more effectively address the juvenile delinquency problem.

If and when the nature, extent, and direction of the relationship is established, LEAA may want to review with HEW the commitment HEW is making in the special education area to determine whether and how additional or currently allocated resources could be more effectively applied to deal with such problems. Knowledge gained concerning this relationship could also provide the impetus for the consideration of innovative and/or alternative approaches to the prevention of juvenile delinquency and the rehabilitation of juvenile delinquents. Changes also could take place in correctional institutions to an extent but, more importantly, the issue could be appropriately addressed by other components of the juvenile justice system as well. For example, more emphasis could be placed on using the results of testing to determine disposition of juveniles when they come in contact with the juvenile justice system at intake and in treating juveniles through community-based facilities and services.

### Secondary learning problems

Fifty-one percent of the delinquents tested in Connecticut and Virginia had secondary learning problems. The extent of secondary learning problems in the Nation's public schools

is unknown, and, in cases where they are detected, what to do about them is unclear.

Part of this uncertainty stems from the apparent causes of secondary learning problems--bad familial or other social situations, or other types of emotional or behavioral problems. Treating these causes may well be beyond the capability or even the purpose of school systems or correctional institutions, and there is a question as to how much can be accomplished with such children if such causes persist.

## RECOMMENDATIONS

We recommend that:

- The Secretary of HEW direct the Assistant Secretary for Education to develop, in conjunction with the States, valid and comparable prevalence rates of children with primary learning problems to determine the amount of resources needed to combat such problems and, on the basis of those rates, develop procedures to better assure that children who have or are likely to experience such problems are adequately diagnosed and treated. This effort would be consistent with the intent of the Education for All Handicapped Children Act of 1975.
- The Attorney General direct the Administrator of LEAA to work closely with the State criminal justice planning agencies to develop requirements in State plans dealing with juvenile delinquency that address the need to fund programs within juvenile correctional institutions to better assure that positive use is made of diagnostic information developed pertinent to the juveniles' educational needs and problems.
- The Assistant Secretary of Education, at the direction of the Secretary of HEW, and the Administrator of LEAA, at the direction of the Attorney General, undertake a jointly funded study to determine the nature, extent, and direction of the relationship (if any) between primary learning problems and delinquent behavior.

If the results of such a study demonstrate such a relationship, we recommend that both agencies work toward the development of a Federal strategy to address the problem of juvenile delinquency through the early identification and appropriate treatment of primary learning problems. Development of such a strategy would be consistent with LEAA's responsibilities

pursuant to provisions of the Juvenile Justice and Delinquency Prevention Act of 1974.

## AGENCY COMMENTS

### Department of Justice

The Department of Justice, by letter dated November 11, 1976, (see app. II) agreed with our conclusions that learning problems are extensive among institutionalized juvenile delinquents, expressed some concern about the language of the recommendations, and outlined certain actions LEAA was taking.

The Department stated that:

--Any conclusions about the relationships of learning disabilities to delinquency based on sampled youth in correctional institutions should be stated with care as institutionalized delinquents represent only the 2 to 5 percent who are actually incarcerated out of the relatively small percentage of delinquents who are caught. Also, because of the rather artificial milieu into which such children are placed, any empirical or subjective tests are not likely to yield a reliable or accurate picture of a child's conduct, personal qualities and characteristics, or ability.

--The learning disability incidence levels reported in the GAO study are not particularly high when compared with other studies of noninstitutionalized populations.

The Department expressed concern with the wording of our proposed recommendation calling for a jointly funded study to "determine the nature, extent, and direction of the relationship (if any) between primary learning problems and delinquent behavior and the conditions under which such a relationship can occur, i.e., how primary learning problems generate, precipitate, or contribute to delinquent behavior." It noted that the latter part of the recommendation implied a causal relationship before any incidence studies of delinquent and nondelinquent samples from the same population using the same definition had been done.

The Department stated that before causal studies are undertaken, studies should first be made comparing delinquent and nondelinquent samples drawn from the same populations. It noted that LEAA was already undertaking studies of the incidence of learning disabilities among delinquents and nondelinquents and the delinquency reduction potential of a

remediation program, and that the results of these studies would provide guidance for subsequent efforts in the area.

With respect to our recommendation that the LEAA Administrator work closely with the State criminal justice planning agencies, the Department stated that it planned to encourage and provide guidance to the States in developing programs dealing with primary learning problems. It noted, however, that although LEAA can provide guidance, the States themselves must make the detailed studies of their needs.

### Our evaluation

We agree that any conclusions about the relationship of learning disabilities to delinquency based on sampled youth in correctional institutions should be stated with care. It is precisely for this reason that we recommended further study before extensive Federal resources are committed to address the problem of juvenile delinquency through the early identification and treatment of primary learning problems. We believe that the difference in prevalence levels of 26 percent among institutionalized delinquents compared to estimates of 1 to 6 percent among the general population is significant enough to warrant further investigation.

We believe the studies being undertaken by LEAA, if properly implemented and controlled, are appropriate. However, we suggest that LEAA consider the comments of HEW regarding such studies.

Our recommendation has been revised to remove any implication of a causal relationship.

Regarding the artificial milieu of the institutional setting, our consultants believe that, although confinement in an institution can indeed affect intellectual functioning, academic achievement, and emotional expression and development, such an environment would not cover up the factors typical of the learning disabled nor cause such factors to develop.

### Department of Health, Education, and Welfare

HEW, by letter dated October 21, 1976, concurred in our recommendation to develop prevalence rates of children with primary learning problems (learning disabilities) and outlined certain steps it was taking in this regard. (See app. III.) It also agreed with the intent of our recommendation for a study to determine the nature, extent, and direction of the relationship (if any) between primary learning problems and delinquent behavior. HEW noted that:

--Any jointly funded research effort should be considered only after the operational definition of learning disabilities has been published in final form, following full professional and public review.

--Safeguards must be built into any study so that researchers do not fall into the predictable temptation of looking for a "cause" for juvenile delinquency rather than recognizing the multiplicity of factors affecting diverse individuals.

HEW also made several technical comments. These are discussed in appendix IV.

In each of the five States, copies of the draft report were provided to appropriate State education and correctional agencies and to the State criminal justice planning agency. Their comments were considered in the report, and changes to the report have been made where appropriate. Generally, the States agreed with our observations.

## THE KINGSBURY CENTER

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### TESTING JUVENILE DELINQUENTS FOR LEARNING PROBLEMS

#### VIRGINIA & CONNECTICUT

1975

#### I. Introduction: Purpose and Procedures of Study

There is no question that many factors--social, cultural, familial...--affect the lives of adolescents who become delinquent. Determining to what extent any given factor may be considered causative is rarely possible, as these factors interact in a complex manner. Amelioration of these various conditions is also difficult. However, one area in which some improvement can be expected, because its resources are to some degree within governmental control, is that of education. Maximizing educational resources would ensure that at least in this one sphere a youngster's needs would be met in as satisfactory a manner as possible.

In order to gather information regarding the incidence of learning problems, the United States General Accounting Office in 1974 commissioned a study of subjects chosen by random sample from detention centers in Virginia and Connecticut. The Kingsbury Center, Inc., a nonprofit remedial education institution in the District of Columbia, was contracted to do the evaluations. Sixty-nine students were tested in the seven detention centers in Virginia, and sixty students were tested in the four detention centers in Connecticut. The purposes of this study were:

1. to differentiate those youngsters who have significant learning problems from those who have none;
2. to determine which of the former have specific learning disabilities;
3. to call attention to the differing educational needs of students with various kinds of learning problems.

For this study we assumed that adolescents who are performing within two years of their proper chronological grade placement

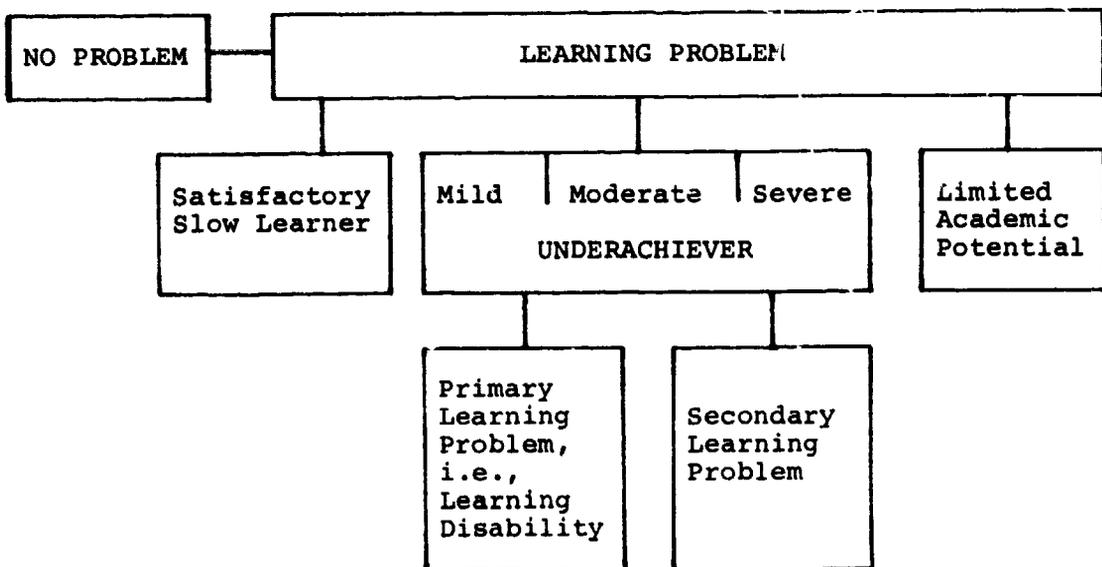
in all of the basic academic skills are sufficiently well equipped to do the work that is required of them in school and therefore do not experience the frustration and failure that can aggravate other existing problems. Although they may experience a variety of difficulties in other areas, they are not considered for the purposes of this study to have learning problems. Youngsters who are performing two years or more below grade level in relation to their chronological age group are considered to have a learning problem. They are divided into categories that have common characteristics that may require different approaches to remediation. These categories are discussed in Section II.

The identification of adolescents who demonstrate signs of learning disability, as defined below, will be a major focus of this evaluation because in the past their specialized characteristics have not always been differentiated from other problems of underachievement. All of the categories we have delineated as having learning problems, however, are populated by youngsters who are in need of special educational assistance in order to continue their acquisition of academic skills.

II. Categories of Students

The categories are represented graphically in this manner:

CLASSIFICATION OF STUDENT



A. No Problem

Students in this category had average or above intelligence (Full Scale I.Q. of 90+ on the WISC or WAIS), had no deficits in basic intellectual functioning that significantly impeded their acquisition of academic skills, and were achieving within two years of grade level.

B. Learning Problems

Adolescents who are unable to perform in a satisfactory manner at or near their regular chronological grade placement are in trouble and need some support in order to function adequately within the school setting. Those who functioned two years or more below chronological grade level were divided for the purposes of our study into three main categories.

1. Satisfactory Slow Learners

Adolescents with low average or slightly below average intellectual ability (Full Scale I.Q. of 75-89 on the WISC or WAIS) who are achieving two or more years below chronological grade level but within two years of the grade level expected for their ability were considered to be functioning satisfactorily as slow learners. If the educational system expects them to progress in accordance with their chronological age placement, however, they may be in need of special services, such as special reading and arithmetic classes.

2. Underachievers

Adolescents of normal intelligence who are achieving two or more years below the level expected for their ability in one or more academic areas were considered to be underachievers. For the purpose of this study, we have included students with a Full Scale I.Q. of 75 or higher on the WISC or WAIS. In the detention center population, most of the subjects tested were culturally deprived. Since such students tend to score somewhat lower than middle class students on intelligence tests such as the WISC and WAIS, we elected to consider I.Q.'s of 75 and above as within the "normal range." In some cases students with a Full Scale I.Q. below 75 were included if they had a Verbal or Performance I.Q. of at least 80, suggesting low average potential.

A student's underachievement was considered: (1) mild if it was just about two years below the level of expectancy; (2) moderate if the deficit was greater than two years but above the primary (first and second grade) level; or (3) severe if the student had been unable to achieve basic skills in reading, written expression, or arithmetic. The severity of a given student's underachievement was determined on the basis of his most serious skill deficit.

Within these levels of underachievement, students were categorized as having either (a) a primary learning problem, i.e., a learning disability, or (b) a secondary learning problem. The achievement of any given student always reflects a variety of personal and social, as well as educational, factors. Most of the adolescents in this study who showed signs of having learning disabilities also had experienced the kinds of life situations that create secondary learning problems. For the purposes of this study, a student showing signs of learning disability was characterized as having a primary learning problem, even though secondary factors might have been present.

Because of the presence of these secondary factors, underachievement was usually not simply a function of the severity of the learning disability. We therefore measured the underachievement in terms of grade level and indicated whether or not learning disability was present but did not specify the degree of correlation between learning disabilities and underachievement.

a. Primary Learning Problem - Learning Disability

The term "learning disability" refers not to any of an undifferentiated number of learning problems nor to generalized retardation of intellectual development, but rather to a demonstrated inability to perform a specific task normally found within the capability range of individuals of comparable mental capacity. It involves deficits in essential learning processes having to do with perception, integration, and verbal and non-verbal expression. Adolescents with learning disabilities generally demonstrate underachievement in one or more academic areas: oral language expression,

reading, spelling and written expression, or arithmetic. The method of identification will be discussed in Section III.

Students with a primary learning problem, or learning disability, because of their specific deficits, may need special techniques of instruction. Often they must be taught how to profit from their strengths and circumvent their weaknesses. Sometimes they can be enabled to improve functioning in the deficient skill. They can benefit from being grouped according to their special needs so that instruction is most efficient. They frequently require teachers trained in the use of special remedial techniques, and more often than not they need a considerable proportion of one-to-one instruction.

b. Secondary Learning Problem

Those underachieving students who did not show the definitive signs of a learning disability were considered to have a secondary learning problem. These youngsters may have been relatively unsuccessful in acquiring academic skills because their attendance did not allow for sufficient instruction, or because serious familial or social problems prevented full attention being given to their educational development, or because emotional or behavioral difficulties interfered with their ability to profit from instruction.

Students with secondary learning problems are significantly behind their peers, and they need remedial instruction designed to accelerate their progress. Special techniques of instruction may or may not be required. Grouping according to the nature and level of skill deficits may make instruction more efficient. When the underachievement is more severe, individualized instruction may be warranted.

3. Limited Academic Potential

Adolescents whose current intellectual functioning was so low (74 or less on WISC or WAIS) that they could not be expected to acquire skills above

elementary school level were placed in this category. They have serious conceptual deficits, often accompanied by serious perceptual deficits. Some may be evenly lagging in all areas of intellectual development, while others may evidence the striking discrepancies in functioning which at a higher intellectual level would suggest learning disability. However, the students we placed in this category would be severely limited in their academic progress even with excellent remedial instruction. Some may be able to achieve only primary level skills at best; others may become functionally literate and conduct their lives outside the academic sphere quite satisfactorily. These youngsters need highly specialized training designed to help them attain optimal development according to their abilities.

### III. Identification of Learning Disability

Learning disabilities in this study were evaluated on the basis of the child's total testing protocol and his behavior in relation to the examiner, and they were generally seen in terms of a constellation of difficulties. Aptitude, perceptual, and academic tests were all examined for error patterns significant for learning disability. The deficits in basic functions had to be evident in the student's academic work in order for him to be classified as learning disabled. Discrepancies in basic functions of the type that indicate learning disabilities included difficulties in the following areas:

- (a) expressive language skills, as might be seen in WISC Verbal scores as much as 15 points below Performance scores in addition to generalized lack of verbal fluency.
- (b) receptive language processing, as might be seen in low receptive vocabulary scores on tests like the Peabody Picture Vocabulary Test or in poor auditory memory combined with frequent necessity to delay responses or re-auditorize questions or instructions.
- (c) auditory perceptual skills necessary for work analysis, as might be seen in inability to sequence sounds or master sound-symbol association for spelling and reading and usually further evident on tests such as the Wepman Test of Auditory Discrimination or the ITPA Sound Blending Test.
- (d) visual-perceptual skills necessary for effective work recognition, such as might be seen in pervasive visual

confusions such as rotation or inversion of stem letters, substitution of other similar-appearing letter or word forms, or transpositions of letters and words in reading and writing and usually further evident on the Slingerland or the Malcomesius Tests.

- (e) visual-motor integration, as might be seen in significant distortion on the Bender Gestalt or Graham-Kendall Tests, or in WISC or WAIS Performance scores 15 points lower than Verbal, as well as in generalized inability to reproduce patterns or letter forms.
- (f) abstract reasoning skill not commensurate with general intellectual level, as might be seen in markedly depressed Similarities and/or Block Design scores on the WISC or almost total and unexpected reliance on concrete trial-and-error processes (note: degree of abstraction is expected to increase with increased intelligence).
- (g) quantitative reasoning skill necessary for development of arithmetic concepts, as might be seen in markedly low scores on WISC and other arithmetic problem solving tests, especially if these reflect skills low in relation to rote computation rather than simple deficits in instruction, and sometimes accompanied by indications of poor spatial organization ability and inadequate grasp of part-whole relationships.

Diagnoses of learning disabilities for this study were educational in nature, made on the basis of examination of the student's total protocol. Where available, the students' records were studied for additional information. Medical judgments were not made. Deficits in visual and auditory acuity and speech impediments were not considered to be learning disabilities. Vision and hearing screening tests were done so that such deficits would not confound the test results. Subjects were screened out if their vision in either eye was worse than 20/30 on the Snellen Chart. On the Maico Audiometer Test, the student had to be able to hear the tones at 20 db in the frequency range 500 to 4,000 in both ears.

Some bilingual students were included in this study. A few students who would have fallen in the random sample were omitted because their English was too poor for valid results using English tests. These students were replaced by other subjects randomly selected. Bilingual students were included only if they stated that they were more fluent in English than Spanish, if they had lived in the United States since birth or shortly after, and if they had always attended school in the United States. In case

of doubt, the English and Spanish teachers were consulted as to the student's language fluency.

It was assumed that adolescents with significant learning disabilities also often have emotional problems. It was further recognized that severe emotional problems may cause specific learning difficulties similar to learning disabilities. In the opinion of the Kingsbury Center, it is not always possible to sort out definite causality in such instances, even with the use of projective testing. However, every effort was made to differentiate adolescents with true learning disabilities from those who did not have learning disabilities but whose emotional problems had resulted in general underachievement. The judgment of whether a student could be classified as learning disabled was ultimately a qualitative one based on the professional experience of the Kingsbury Center in evaluating youngsters with learning disabilities and other learning problems. Each student's protocol was examined by three diagnosticians for reliability of classification, and the diagnoses were reviewed by a clinical psychologist.

#### IV. Tests Administered

The following tests were administered to all students:

- Wechsler Intelligence Scale for Children, Revised or
- Wechsler Adult Intelligence Scale\*
- Peabody Picture Vocabulary Test
- Bender Visual-Motor Gestalt Test
- Human Figure Drawings
- Gray Oral Reading Test, Form A
- Nelson Reading Test, Form B
- Paragraph Comprehension
- Wide Range Achievement Test
- Reading
- Spelling
- Arithmetic
- Written Expression - Story Composition

The following tests were administered when necessary for further clarification of learning problems:

- Graham-Kendall Memory-for-Designs Test
- Wechsler Memory Scale
- Ferkauf Auditory Recognition Test
- Wepman Auditory Discrimination Test
- Roswell-Chall Diagnostic Reading Test
- Illinois Test of Psycholinguistic Abilities
- Sound Blending Subtest

\*When WISC's or WAIS's had been administered recently and records were available, these tests were not readministered.

Slingerland and Malcomesius Screening Tests for Children with  
Specific Language Disability  
Visual Discrimination Test  
Informal Arithmetic Problem Solving  
Informal Word Lists for Visual Discrimination



## UNITED STATES DEPARTMENT OF JUSTICE

WASHINGTON, D.C. 20530

NOV 11 1976

Address Reply to the  
Division Indicated  
and Refer to Initials and Number

Mr. Victor L. Lowe  
Director  
General Government Division  
United States General Accounting Office  
Washington, D.C. 20548

Dear Mr. Lowe:

This letter is in response to your request for comments on the draft report entitled "Learning Disabilities: The Link to Delinquency Should be Researched, But Schools Should Do More Now."

We have reviewed the report and are in general agreement with the conclusion that learning problems are extensive among institutionalized juvenile delinquents. However, our major concern is the caution which must be taken in accepting the recommendations. This caution is based on what we consider weaknesses in the data from which the findings and conclusions are derived. Several of our comments focus on this issue.

As an initial comment, we would like to point out that the Law Enforcement Assistance Administration's (LEAA) implementation of its new authority granted under the Juvenile Justice and Delinquency Prevention Act was in the early stages of accomplishment at the time the GAO study was undertaken. Guidelines had just been issued and funds appropriated for juvenile delinquency were at an extremely low level. Also, to place the report in proper perspective, the report should have acknowledged that the Juvenile Justice Act specified several program activities for priority attention by LEAA. These programs were, as stated in the statute, diversion, deinstitutionalization, and separation of juveniles from adult offenders. LEAA began focusing its initiatives on these priority programs almost immediately.

In general, we consider the findings to be clearly stated. The distinction between "primary" and "secondary" learning problems is excellent. This distinction is a particularly important one, both conceptually and empirically, as well as from the viewpoint of initiating recommendations as they relate to the respective legislative responsibilities of LEAA and the Department of Health, Education and Welfare (HEW). Specifically, primary learning problems--as they relate to delinquency--are of central concern to LEAA, whereas secondary learning problems have considerably more relevance to HEW.

While GAO's data collection and analysis efforts are impressive and the result of considerable effort, we believe the conclusions and related recommendations must be accepted with caution. Any conclusions about the relationships of learning disability to delinquency based on sampled youth in correctional institutions should be stated with considerable care because of the population represented. Institutionalized delinquents represent only the 2-5 percent who are actually incarcerated out of the relatively small percentage of juvenile delinquents who are caught and, further, out of the 50 percent or fewer who are not screened or diverted. Add to this restricted sample of juvenile delinquents the rather artificial milieu into which they are placed, and any empirical or subjective tests are not likely to yield a reliable or accurate picture of a child's conduct, personal qualities and characteristics, or ability. The reasons for individual behavior are complex and the application of methodologies are important.

The learning disability incidence levels reported in GAO's study are not particularly high when compared with other studies of noninstitutionalized populations. We therefore urge caution in using this data as a basis for viewing learning disabilities as a major cause of delinquency.

The report also emphasizes the need to develop adequate procedures for early identification of all children with primary learning problems and, after adequate referral and testing processes, placement in special education programs. We consider this approach a sound one. However, to suggest that schools and juvenile institutions alone can cope with the problem is an over-simplification. The family, community, and many other individuals and local organizations need to be involved. Further, personal

qualities and characteristics, such as heredity, nutrition, overall health, etc., contribute to primary learning problems, and these factors have to be understood, examined, and acted on in order to attain program impact.

With respect to the conclusions and recommendations of the report, GAO raises the question on page 70 as to whether primary learning problems cause juvenile delinquency. The report recommends that if a causal relationship is established, LEAA and HEW should consider placing more emphasis on such problems as one additional means of addressing the issue of juvenile delinquency. A further recommendation on page 73 suggests that HEW and LEAA undertake a jointly funded study to determine the nature, extent, and direction of the relationship (if any) between learning disabilities and delinquent behavior. If the results of the study show that there is a relationship, the recommendation is further made that both LEAA and HEW work towards the development of a Federal strategy to address the problem of juvenile delinquency through the early identification and appropriate treatment of learning disabilities.

In reference to the above recommendations, LEAA is already undertaking a study of the incidence of learning disabilities among delinquents and nondelinquents and the delinquency reduction potential of a remediation program. Of concern, however, is the language of the second part of the recommendation on page 73. The recommendation language that the study determine "how learning disabilities generate, precipitate or contribute to delinquent behavior" implies that a causal relationship exists. Our concern with any indication of causality before incidence studies are completed is based on what we consider weaknesses in the data on which GAO based its findings and conclusions. The incidence study conducted by GAO focused on institutionalized delinquents, and did not incorporate a sample of nondelinquents. Therefore, the recommendation is based on the limited work done by GAO, plus estimates of learning disabilities in the general youth population made by HEW and one Colorado study.

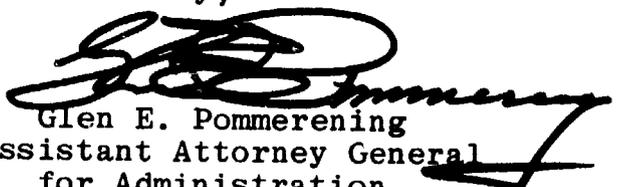
In our judgement, studies should first be conducted that are designed to provide a direct comparison between delinquent and nondelinquent samples drawn from the same population in terms of the incidence of learning disability.

Previous studies utilized varying definitions, different methodologies, and dissimilar populations. Such studies as we plan to undertake may well show that the incidence levels of learning disabilities are similar among delinquent and nondelinquent populations. Such a finding would argue against the utility of causal studies. In any event, the results of these incidence studies will provide guidance for our subsequent efforts in this area.

GAO recommends, on page 73 of the report, that the LEAA Administrator "work closely with the SPA's to develop requirements in State plan sections dealing with juvenile delinquency that address the need to fund programs within juvenile correctional institutions to better assure that positive use is made of diagnostic information developed pertinent to the juveniles' educational needs and problems." We agree with the intent of this recommendation and plan to encourage and provide guidance to the States in developing programs dealing with primary learning problems. While LEAA can provide guidance to the SPA's to assist them in formulating their State plans, it is important to recognize that the States themselves must make the detailed study of their needs as required by Section 223(a)(8) of the Juvenile Justice and Delinquency Prevention Act. If their studies indicate a need for programmatic attention, the determination of whether funding will follow is a matter within the priority-setting function of the SPA's.

We appreciate the opportunity given us to comment on the draft report. Should you have any further questions, please feel free to contact us.

Sincerely,

  
Glen E. Pommerening  
Assistant Attorney General  
for Administration

GAO note: Page references in this appendix may not correspond to page numbers of the final report.



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
OFFICE OF THE SECRETARY  
WASHINGTON, D.C. 20201

OCT 21 1976

Mr. Gregory J. Ahart  
Director, Human Resources  
Division  
United States General  
Accounting Office  
Washington, D.C. 20548

Dear Mr. Ahart:

The Secretary asked that I respond to your request for our comments on your draft report entitled, "Learning Disabilities: The Link to Delinquency Should Be Researched, But Schools Should Do More Now". The enclosed comments represent the tentative position of the Department and are subject to reevaluation when the final version of this report is received.

We appreciate the opportunity to comment on this draft report before its publication.

Sincerely yours,

  
John D. Young

Assistant Secretary, Comptroller

Enclosure

Comments of The Department of Health, Education, and Welfare on the GAO Draft Report to the Congress of the United States entitled "Learning Disabilities: The Link to Delinquency Should be Researched, But Schools Should Do More Now"

GAO RECOMMENDATION

The Secretary of HEW direct the Assistant Secretary for Education to develop, in conjunction with the States, valid and comparable prevalence rates of children with primary learning problems, to determine the amount of resources needed to combat such problems, and on the basis of those rates, to develop procedures to better assure that children who have or are likely to experience increased severity of such problems are adequately diagnosed and treated. This effort would be consistent with the intent of the Education for All Handicapped Children Act of 1975.

DEPARTMENT COMMENTS

We concur, with the understanding that the term "primary learning problems" used in the report is synonymous with the term "specific learning disabilities" as described in the Education of the Handicapped Act. The term "specific learning disabilities" is included in the statute and understood by the profession while the term "primary learning problems" has no commonly understood meaning beyond this report. The statute requires that State education agencies report to the Commissioner no later than April 1 of each year, the average number of handicapped children residing in the State who were receiving special education and related services on October 1 and February 1 of that school year. The first such count is due from the States by November 29, 1976. Identification of children to be served was initiated through the Education of the Handicapped Act, which provided for a child-find system in each State which would locate and identify unserved children with specific learning disabilities (primary learning problems).

In order to identify children with specific learning disabilities, the Office of Education will specify the conditions which may be considered as specific learning disabilities and develop procedures that the Office of Education and the State education agencies will use to insure that the local education agencies are utilizing this definition in their diagnostic procedures. Publication of regulations to administer this requirement is scheduled for November 29, 1976. The availability of one specific learning disabilities definition, to be used by all SEAs and LEAs, will greatly enhance the ability of the educational community to assess and serve the field of learning disabilities.

The estimate of resources necessary to serve children with specific learning disabilities will depend on the number of children identified after the definition and regulations have been implemented and in effect. It should be noted that the provision of appropriate special education services by States to these children is a requirement of the law independent of the level of Federal appropriations. State and Federal funding, the provisions for extensive child identification, due process, confidentiality, and placement in the least restrictive environment, plus the provision for a written, individual educational plan for each handicapped child, insure adequate identification, diagnosis and treatment of children with primary learning problems.

GAO RECOMMENDATION

We recommend that the Assistant Secretary for Education at the direction of the Secretary of HEW and the Administrator, LEAA, at the direction of the Attorney General, undertake a jointly funded study to determine the nature, extent, and direction of the relationship (if any) between learning disabilities and delinquent behavior, and the conditions under which such a relationship can occur, i.e., how learning disabilities generate, precipitate, or contribute to delinquent behavior.

If the results of such a study demonstrate that there is such a relationship as defined in terms of the above criteria, we recommend that both agencies work toward the development of a Federal strategy to address the problem of juvenile delinquency through the early identification and appropriate treatment of learning disabilities. Development of such strategy by LEAA would be consistent with the agency's responsibilities pursuant to provisions of the Juvenile Justice and Delinquency Prevention Act of 1974.

DEPARTMENT COMMENTS

We concur with the intent of this recommendation and agree that there is need for additional research into the nature of the relationship between learning disabilities and juvenile delinquency. However, any such jointly funded effort should be considered only after the operational definition of learning disabilities required by the Congress has been published in final form, following full professional and public review. This review procedure, dating from the November 29 publication date in the Federal Register, will require a minimum of one year to complete. The models for such joint research would include matching groups of learning disabled delinquents and nondelinquent individuals in an attempt to identify the variables that discriminate between these two groups; i.e., the nature, extent and direction of the relationship, and the conditions under which such a relationship (if any) can occur.

Also, we believe that safeguards must be built into any study so that researchers do not fall into the predictable temptation of looking for a "cause" for juvenile delinquency rather than recognizing the multiplicity of factors affecting incredibly diverse individuals. This same temptation of looking for a single cause has limited progress in reading and learning disability instruction.

[See GAO note 1, p. 63.]

[See GAO note 2, p. 63 .]

TECHNICAL COMMENTS [See GAO note 2, p. 63.]

Several procedures employed in the collection of data for this study seem to depart from proper experimental design strategies.

1. While results are purported to provide a "reliable picture for the institutionalized children of the States when the tests were made," no demographic data on the experimental population was provided. The generalizability of these results seems to be questionable without further description of the experimental groups (p. 5, GAO Draft Report). For example, their length of institutionalization is a factor which must be considered.
2. The raw data were not included in the report or furnished for our review and approval. As has been discussed with GAO on prior occasions, this is necessary so that the results can be evaluated objectively.

3. Academic discrepancy was calculated relative to grade placement for the chronological age rather than to information regarding IQ. Intelligence quotient is critical to the determination of discrepancies in academic performance.
4. The term "secondary learning problems" was used extensively without operationally defining it.
5. Causation was inferred from correlational data (p. 12, GAO Draft Report).
6. The use of 6% as the incidence for learning disabilities in this report was based on 6% figure purportedly cited by HEW (p. 34, GAO Draft Report). However, the figure that HEW actually uses is 2%.
7. GAO reports that teachers were used to "reliably" estimate the number of children in need of special services even though they stated that "learning problem identification generally requires an extensive multi-disciplinary diagnostic evaluation" (p. 43, GAO Draft Report).

Available data on institutionalized delinquents reveals that those with learning disabilities have typically not been identified in school.

8. Since "most of the subjects tested were culturally deprived," measures of language dominance should have been included (p. 75, GAO Draft Report). Moreover, the omission of subjects with poor English skills (p. 78, GAO Draft Report) was not procedurally explained and test results could be depressed due to the use of inappropriate instruments for subjects from bilingual environments.
9. We suggest that the report be changed to indicate that Verbal-Performance discrepancies of the kind used in classifying children as having "difficulties in expressive language" may have been due to confounding cultural and linguistic barriers (p. 77, GAO Draft Report).
10. The ITPA, Wepman and Bender tests used by the GAO researchers are inappropriate; the normative data compiled on the ITPA and Wepman are not applicable to adolescents; the Bender is normally used to indicate serious brain damage in children.
11. No specific criteria were reported for the use of the supplementary tests "for further clarification of learning problems" (p. 79, GAO Draft Report). The results could be biased if all subjects did not receive the same treatment.

GAO notes: 1. Comments have been deleted because of changes to final report.

2. Response to these comments is in app. IV.

Page references in this appendix may not correspond to page numbers of the final report.

HEW TECHNICAL COMMENTS AND OUR ANALYSISHEW comment

1. While results are purported to provide a "reliable picture for the institutionalized children of the States when the tests were made," no demographic data on the experimental population was provided.

Response

Demographic data on the experimental population was not available at the institutions. Thus, we were precluded from taking a sample that would take into account various demographic characteristics. We believe, however, that the results do provide a reliable picture of the institutionalized children when the tests were made.

HEW comment

2. The raw data was not included in the report or furnished for our review and approval.

Response

It is not our policy to provide raw data for analysis, review, and approval. In this particular study, each student's protocol was examined by three diagnosticians of the Kingsbury Center for reliability of classification, and the diagnoses were further reviewed by a clinical psychologist. We accept the collective judgments of the Kingsbury Center's diagnosticians and the psychologist.

HEW comment

3. Academic discrepancy was calculated relative to grade placement for the chronological age rather than information regarding IQ. Intelligence quotient is critical to the determination of discrepancies in academic performance.

Response

HEW's comment is erroneous. The academic discrepancy of each child was calculated by comparing his achievement level to the level of his intellectual functioning or IQ. Youngsters were classified according to discrepancy between academic performance and academic expectations for their ability as defined in appendix I, pages 47 to 51.

For differential diagnosis and appropriate remediation, a youngster must be evaluated in relation to discrepancies within himself. However, any youngster achieving more than 2 years below his grade placement for chronological age presents a problem to his teacher and to the academic institution which he attends.

HEW comment

4. The term "secondary learning problems" was used extensively without operationally defining it.

Response

The term "secondary learning problems" was deliberately not given an operational definition. It was simply set up as the category into which all of the delinquents who were of normal intelligence, underachieving, but not showing signs of learning disability, could be placed. The purpose of the study was to determine those delinquents who were learning disabled. During the study it became necessary to describe some other kinds of learning problems largely to clarify the difference between such problems and learning disabilities.

HEW comment

5. Causation was inferred from correlational data.

Response

The statement referred to has been deleted from the report.

HEW comment

6. The use of 6 percent as the incidence for learning disabilities in this report was based on 6 percent figure purportedly cited by HEW. However, the figure that HEW actually uses is 2 percent.

Response

The report has been clarified to indicate that the 6-percent figure was cited by an HEW official.

HEW comment

7. GAO reports that teachers were used to reliably estimate the number of children in need of special services even though they stated that "learning problem identification generally require an extensive multidisciplinary diagnostic evaluation."

Response

The report has been revised to state that we considered teachers' estimates of the number of children requiring evaluation to determine the need for such services to be generally reliable.

HEW comment

8. Since most of the subjects tested were culturally deprived, measures of language dominance should have been included. The omission of subjects with poor English skills was not procedurally explained, and test results could be depressed due to the use of inappropriate instruments for subjects from bilingual environments.

Response

There appears to be some confusion on the part of HEW between the terms "culturally deprived" and "bilingual." Most of the students tested came from culturally deprived backgrounds but were not bilingual. The students in the population who were of bilingual background were reviewed by the institution school staff and the consultants, and language dominance was evaluated without formal testing. The procedure followed for omitting students with poor English skills and including students who could be validly tested was described on pages 52 and 53 of appendix I.

HEW comment

9. We suggest that the report indicate that verbal-performance discrepancies of the kind used in classifying children as having "difficulties in expressive language" may have been due to confounding cultural and linguistic barriers.

Response

The problem of sorting out youngsters with expressive language disabilities from those with cultural and linguistic

disadvantage is recognized. However, our consultants believe that specific language disability represents a constellation of factors which can be differentiated from cultural deficits. The verbal responses of students were qualitatively analyzed, and the consultants believe it was possible to determine which students had expressive language problems and which students simply expressed themselves in nonstandard English. It was evident that full credit answers could be given to Wechsler Intelligence Scale For Children Verbal questions using nonstandard English. The students with expressive language disability gave answers of very different quality from the answers of culturally deprived or nonstandard English speakers.

#### HEW comment

10. The ITPA [Illinois Test of Psycholinguistic Abilities], Wepman, and Bender tests used by GAO researchers are inappropriate; the normative data compiled on the ITPA and Wepman are not applicable to adolescents; the Bender is normally used to indicate serious brain damage in children.

#### Response

The consultants feel that the Bender, Wepman, and ITPA tests are appropriate. It is standard procedure in diagnosing adolescents to use the perceptual motor and information processing tests which have been normed on younger children. If an adolescent shows difficulty with a skill that is normally acquired by the age of 8 or 10, this information can be used in conjunction with the qualitative analysis of educational testing to clarify the nature of the learning problem.

The Bender, Wepman, and the ITPA tests were not scored with norms designed for younger children but were evaluated clinically, a procedure which Loretta Bender prefers instead

of any formalized scoring procedure on her test. 1/ Wepman also has discussed the use of his test with older children. 2/ The Bender test is commonly used for children, adolescents, and adults in a variety of ways. Elizabeth Koppitz, in her book on the Bender Test, notes that it has been used to differentiate among brain-damaged, emotionally disturbed, and normal adolescents. 3/

#### HEW comment

11. No specific criteria were reported for the use of the supplementary tests for further clarification of learning problems. The results could be biased if all subjects did not receive the same treatment.

#### Response

The differential diagnosis of subjects as to the nature of their learning problems was done with the basic battery of tests administered to all students. The supplementary tests were used informally and nonnormatively for diagnostic-prescriptive purposes. As requested by the institutions, the consultants wrote reports that could be used by teachers in designing educational programs for each student in the study.

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1/Koppitz, Elizabeth M., The Bender Gestalt Test for Young Children, Vol. II (New York: Grune and Stratton, 1975), p. 9.

2/Wepman, Joseph W., Manual of Administration, Scoring and Interpretation--Auditory Discrimination Test (Chicago, Ill: Language Research Association, 1973)

3/Koppitz, p. 73.

PRINCIPAL OFFICIALS OF  
THE DEPARTMENT OF JUSTICE AND THE  
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
RESPONSIBLE FOR ADMINISTERING ACTIVITIES  
DISCUSSED IN THIS REPORT

<u>Tenure of office</u>	
<u>From</u>	<u>To</u>

DEPARTMENT OF JUSTICE

ATTORNEY GENERAL:

Griffin B. Bell	Jan. 1977	Present
Edward H. Levi	Feb. 1975	Jan. 1977
William B. Saxbe	Jan. 1974	Feb. 1975
Robert H. Bork (acting)	Oct. 1973	Jan. 1974
Elliot L. Richardson	May 1973	Oct. 1973
Richard G. Kleindienst	June 1972	May 1973
Richard G. Kleindienst (acting)	Mar. 1972	June 1972
John N. Mitchell	Jan. 1969	Feb. 1972

ADMINISTRATOR, LAW ENFORCEMENT  
 ASSISTANCE ADMINISTRATION:

Richard W. Velde	Sept. 1974	Present
Donald E. Santarelli	Apr. 1973	Aug. 1974
Jerris Leonard	May 1971	Mar. 1973
Vacant	June 1970	May 1971
Charles H. Rogovin	Mar. 1969	June 1970

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

SECRETARY OF HEALTH, EDUCATION,  
 AND WELFARE:

Joseph A. Califano Jr.	Jan. 1977	Present
David Mathews	Aug. 1975	Jan. 1977
Caspar W. Weinberger	Feb. 1973	Aug. 1975
Frank C. Carlucci (acting)	Jan. 1973	Feb. 1973
Elliot L. Richardson	June 1970	Jan. 1973

<u>Tenure of office</u>	
<u>From</u>	<u>To</u>

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE (Cont'd)

## ASSISTANT SECRETARY (EDUCATION):

Philip E. Austin (acting)	Jan. 1977	Present
Virginia Y. Trotter	June 1974	Jan. 1977
Charles B. Saunders, Jr. (acting)	Nov. 1973	June 1974
Sidney P. Marland, Jr.	Nov. 1972	Nov. 1973

## COMMISSIONER OF EDUCATION:

William F. Pierce (acting)	Jan. 1977	Present
Edward Aguirre	Oct. 1976	Jan. 1977
William F. Pierce (acting)	Aug. 1976	Oct. 1976
Terrel H. Bell	June 1974	Aug. 1976
John R. Ottina	Aug. 1973	June 1974
John R. Ottina (acting)	Nov. 1972	Aug. 1973
Sidney P. Marland, Jr.	Dec. 1970	Nov. 1972