DOCUMENT RESUME

ED 117 262 UD 015 664

AUTHOR Kosinski, Sharon
TITLE Methodological Issues in the Early Identification of a High Risk Population in an Urban Public School System.
PUB DATE Nov 75
NOTE 43p.; Paper presented at the Rocky Mountain Educational Research Association Annual Conference (6th, Las Cruces, New Mexico, November 13-14, 1975)

EDRS PRICE MF-$0.76 HC-$1.95 Plus Postage
DESCRIPTORS *Evaluation Methods; Exceptional Students; Family Environment; Family Influence; Group Tests; Health Conditions; *Human Development; Identification; *Identification Tests; *Kindergarten Children; Language Development; *Learning Difficulties; Screening Tests
IDENTIFIERS Project HELP; Project Highlighting Early Learning Problems

ABSTRACT

This paper describes Project HELP (Highlighting Early Learning Problems) stated to have been designed to determine or to develop a battery of screening instruments to identify those K-1 students who manifest learning problems indicative of exceptionality. The purposes, objectives, and a summary of the types of evaluation questions the study sought to investigate are provided. The methodology section contains a description of the sample involved and the screening instruments used. The instruments used in the identification of potential learning problems at level one include a teacher checklist of development, parent checklist of development, teacher observation survey, and language and health screening form. A summary of the procedure involved with each instrument is discussed. The results of the study indicate an overall high risk percentage of approximately 22 percent which is considered to approximate theoretical high risk percentages of potential learning problems specified by professionals in the field of special education. Several recommendations are made, among them being a projected information retrieval system, a proposed diagnostic/assessment center, and in-service training program. (Author/AM)

Methodological Issues in the Early Identification of a High Risk Population in an Urban Public School System

by

Sharon Kosinski, Ph.D.
Senior Evaluator-Special Education
Department of Research and Evaluation
Dallas Independent School District

Paper presented at the RMREA
Annual Meeting Program, Las Cruces, New Mexico, 1975

Methodological Issues in the Early Identification of
High Risk Population in an Urban Public School System

Historically, attempts at developing techniques for the early identification of learning problems have followed a number of divergent paths. The techniques and approaches used have as a natural course reflected the orientations prevalent in the various professional groups who have interested themselves with this vital problem. As a consequence, the problem of early identification of learning difficulty have been investigated on the basis of psychological or behavioral symptoms, as being a function of socio-economic or environmental deprivation and in more recent years serious consideration has been given to the physiological aspect of learning disability.

In making a critical examination of instruments used for this purpose it was found that they exhibited one or more of the following characteristics: They were difficult to administer; required too much time for completion; assumed training background on the part of the examiner which may not have existed; were written in language not familiar to the examiner; were difficult to quantify; lacked validation with an external criterion, were found to require experience for interpretation, and, in general, assessments were found to be of specific rather than cross sectional behaviors.

There were problems also associated with inaccurate and unclear definitions of the population, labeling as a result of theory biases, and hit or miss remedial programs (Lerner, 1971; Capaobianco, 1964; Ensminger, 1970; Deno, 1970).

Support for the importance of early identification comes from the physical disability or disease model. One of the important assumptions

of this model, however, is that the condition to be identified is seen as already existent in the child. When early identification efforts are applied to exceptionalities of more educational or psychological definition are applied to identifying kindergarten or first grade children who may become learning failures, one is hypothesizing rather than confirming. The conditions which are being viewed as atypical, for example, learning disability, failure in school, have not yet developed. The concerns are that these conditions will develop. Children who have not been exposed to a reading program cannot really be said to have reading problems; children who have not participated in a first grade program cannot be classified as first grade failures. In short, when we screen for learning failures at or before formal school entrance, we do not recognize a condition which is already there, we are looking at potential learning problems.

Effective early identification is critical and may be accomplished given changes in emphasis and techniques. Specification and clarification of the evidence used for identification, as well as broadening the base of identification data are needed in the development of a screening program.

Screening refers to the initial steps in determining if a child is developing according to normal patterns or if he manifests behavior which suggests the need to conduct a complete diagnostic study for potential problems. A practical screening procedures: (1) can be conducted within any public school setting, (2) can be administered in its initial phases to large numbers of pupils in a short period of time or by classroom teachers after minimal study and practice, (3) will quickly and validly identify high-risk pupils when interpreted by

educational diagnosticians, (4) is financially economical and feasible, and (5) will provide information that can be used immediately in preliminary educational planning.

Establishing A Screening Program

Since prevalence estimates vary among school districts and even among schools within a district, it is necessary to identify by actual count those children who need special services. Only after the children have been located can the school administration plan an adequate program of diagnostics and instructional intervention. The size of the district is important for planning a screening program only when screening activities are administered from the central office level. Size will not affect the district when screening and subsequent decision making is conducted at the local building level.

Given the K-1 population as the population to be screened, the district must next decide what kind of pupil information is both desirable and necessary to provide a realistic screening program. Specifically, what type of information is needed to satisfy the requirements of the operational definition and the objectives of the screening program?

The various tasks of data collection and summarization by teachers and supportive personnel must be coordinated. In addition to the classroom teacher and principal, others who should be included in the screening process are school nurse, speech therapist, school psychologist, and parents.

Selection of Screening Instruments

The selection of instruments for identifying potential learning problems is a critical task. Criteria for a screening instrument at

a phase one, gross identification level should include the following.

1. Be oriented for use by the teacher in a classroom setting.
2. Assessment of items should be objective and free of ambiguity.
3. The inventory should be easily quantified.
4. The number of items should assess an appropriate cross section of behaviors.
5. The number of items should be restricted to permit recording of observations in a minimal length of time.
6. The instrument should provide an observational cross section of behaviors which might prove useful to other professionals who might come into contact with the child.
7. Relevant criteria should be available for the validation of test items.

Identification based on standardized quantified test instruments screens out important evaluative information, for example, the child's behavior in the classroom, his problem-solving strategies. Keogh (1972) has summarized limitations of the standardized test battery orientation in assessment, and calls for a process oriented, behavioral approach to educational evaluation. A behavioral approach to early identification received support from a number of independent investigators (Cobb, 1972; Fargo, Roth, & Cade, 1968; Haring & Ridgway, 1967; Lahaderne, 1968; Spivack, Swfit, & Prewitt, 1971; Westman, Rice & Berman, 1967). Behaviors as they relate to possible developmental delays were taken into account in the development of the parent-teacher checklist in the study being presented in this paper.

Closely related to questions of what data are relevant in early identification is the question of who might best provide that information. Examination of referral patterns of children with school learning problems demonstrates clearly that the classroom teacher is the major initial

source of identification and referral (Hansen, 1970; Keogh, Becker, Kukic, & Kukic, 1972). In recent work Keogh and Tchir (1972) found that kindergarten and first grade teachers sensitive to high risk indicators as reflected in classroom behaviors. Fargo, et. al. (1968) reported that preschool teachers were more accurate than pediatricians or psychologist in predicting later school achievement of children in their sample. Thus, the systematic inclusion of teacher observations as a source of information about classroom performance was also a major source of data collection information in the DISD study.

Introduction

A review of past research has suggested that early identification of children with learning problems is essential in order to allow proper response to present and potential learning problems. Failure to diagnose problems early may result in an expectancy for a child to build new skills from those he has never had. The result may be failure in the upper grades in school. As failures increase, a child's opinion of himself as a learner is likely to decrease, leading to a hard-to-break failure cycle.

In screening for "high risk" students, the Dallas Independent School District was concerned with providing a systematic effort to facilitate early identification of those students that may require "provision of services additional to, supplementary with, or different from those provided in the regular school program...to meet the needs of exceptional children" (Bulletin 711).[1] "High risk" screening must, therefore, be comprehensive in nature in order to provide screening for learning problems in all areas of exceptionality.

[1]Texas Education Agency, Administrative Guide and Handbook for Special Education - Bulletin 711, March, 1973, p. 2.

Since prevalence estimates vary among school districts and even among schools within a district, it is necessary to identify through descriptive statistical procedures those children who need special services. It is felt that through a systematic, on-going program of early identification and intervention the developmental competence of children will be enhanced and their chances to succeed in school will be improved.

Learning problems are classified as academic and/or behavior problems that are indicative of potential learning difficulties. Because of these learning problems, students may not be able to function at their potential without special services. These children are considered "high risk" in that their failure to pass first level screening procedures may be indicative of potential learning problems.

The rationale behind Project H.E.L.P. (Highlighting Early Learning Problems) was developed by an appointed subcommittee of the Professional Advisory Committee on Learning Disabilities. The Subcommittee recommended that DISD select a group of tests that warranted consideration for ultimate inclusion in a preschool screening battery; that DISD have a reasonably large sample of pupils evaluated by each of the instruments; and that follow-up evaluations be done to validate the instruments using the 20,000 kindergarten/first-grade population from which to draw samples.

Project H.E.L.P. was based on the district's need to screen all K-1 students to identify behavior indications of an area of exceptionality as defined in Texas Education Agency (TEA) Bulletin 711. Its purpose was as an investigative study to determine or to develop a battery of screening instruments to identify those K-1 students who

manifest learning problems indicative of exceptionality as defined in TEA Bulletin 711. A list of the purposes and objectives in Project H.E.L.P. are outlined below.

Purposes. To determine or to develop a battery of screening instruments designed to: (a) grossly identify those K-1 students who manifest behavior indicative of potential learning problems, (b) specify the types of potential learning problems through the use of more definitive instruments, (c) document those students with existing learning problems by means of diagnostic procedures, (d) determine those students who manifest behaviors that are indicative of existing or possible learning difficulties but do not meet Bulletin 711 criteria for eligibility in any area of exceptionality other than learning disabilities.

Objectives. The objectives of this project were to screen all K-1 students in order to: (a) identify those students who demonstrate behavior indicative of potential learning problems by use of primary gross screening techniques (see purpose a), (b) further specify the types of potential learning problems through the use of more detailed secondary screening techniques (see purpose b), (c) undertake diagnostic assessment procedures for the purpose of determining the presence and extent of potential learning problems as ascertained during secondary screening (see purpose c), (d) study those students identified through objectives a and b as having some indication of potential learning problems in order to determine appropriate psychoeducational follow-up (see purpose d), (e) follow the students designated as high risk on a longitudinal basis in order to determine if the correct diagnosis was made and in order to determine what changes need to be made in their educational programs.

Based on the quantity of independent levels of information that had been specified as required in order to implement Project H.E.L.P. system-wide, there was a need to establish a data base to handle information for the development of a system-wide screening program for K-1 students. Evaluation Report No. 75-598 (Research & Evaluation Department, DISD, 1975) contains information relevant to the Project H.E.L.P. data base. This report represents level one - the gross identification level of potential learning problems in kindergarten, first grade students.

A summary of the types of evaluation questions the study sought to investigate are as follows:

1. What percentage of students by grade, sex, and ethnicity were involved in the screening program across all screening tests?
2. What was the percentage of high risk K-1 students by item responses to the Parent Checklist of Development?
3. What was the percentage of high risk K-1 students by item responses to the Teacher Checklist of Development?
   - 3.1 What is the relationship between teacher responses and parent responses to the Checklist of Development?
   - 3.2 Are there significant group mean differences between parent and teacher responses to the Parent and Teacher Checklists of Development?
4. What are the percentages of high risk K-1 students by category response to the Health Screening Information form?
5. What was the percentage of high risk K-1 students by category responses to the Language Screening Information form?

6. What is the percentage of predicted high risk K-1 students by teacher response to the Teacher Observation Survey?

7. What school areas have the highest incidence of students with potential academic and/or behavior problems?

8. Given the criterion for the teacher observation survey, how does the criterion relate to high risk responses on each of the other instruments?

9. Given demographic information (grade, sex, ethnicity) on the K-1 population, how does this information relate to high risk responses on the screening instruments?

   9.2 Given the sex criterion on the K-1 population, how does this information relate to high risk responses on the screening instruments?

   9.3 Given ethnicity criterion on the K-1 population, how does this information relate to high risk responses on the screening instruments?

10. What is the relationship of Parent and Teacher Responses to responses on the Language Screening form, Health Screening form, and Teacher Observation Survey?

Methodology

This section contains a description of the samples involved in this study and the screening instruments used.

Sample

The parents and teachers, respectively, of a random sample of 2,000 kindergarten-first grade (K-1) students received the Parent-Teacher Checklist of Development. This was based on a ten percent sample of the

district's K-1 population. It was assumed the ten percent sample approximated the K-1 population. The random sample was generated from a random numbers program that selected students by their ID number on the basis of their placement in either a kindergarten or first grade program. A teacher observation survey was implemented district-wide and was sent to each kindergarten and first grade teacher in the Dallas school district. A system-wide language screening form (completed by all speech therapists) and a health screening form (completed by all school nurses) was also implemented.

Instrumentation

The instruments used in the identification of potential learning problems at level one in the screening program are as follows.

Teacher checklist of development and the teacher observation survey. Analyses of patterns of referral of children for evaluation and for possible special educational programming have shown clearly that most referrals originate with the classroom teacher. Increased awareness of the importance of early identification of children with school learning problems places responsibility on the classroom teacher for recognition of behaviors which are indicative of potential learning difficulties. The teacher checklist of development and the teacher observation survey was developed on the rationale that teachers could identify potential high risk children. The term "potential learning problem" is used at the kindergarten-first grade level because of the poor predictive validity of standardized test measures with this age group.

Parent checklist of development. The critical influence of the home on child behavior and learning cannot be excluded in a dynamic screening program. A major responsibility for the identification of K-1 children

with potential learning problems would have to rest on their parents. An effective screening program depends not only upon the services provided and the teacher-child relationship, but also in a wider perspective, it depends upon a total coordinated approach involving all significant persons in the child's life. In this context, parents are central figures who can give valuable information concerning the developmental stages of their child. The parent checklist of development was developed on the rationale that parents could identify developmental lags in their children.

The system-wide teacher observation survey was designed to determine what was the perception of the K-1 teacher in designating which students would have potential learning problems in the academic and/or behavior areas.

Health screening form. Since visual or auditory deficiency may be factors in certain cases of reading disability, an eye examination and audiology screening must be included at level one in a screening program. The Health Screening form contained one section for information from the school nurse concerning pass, fail, or not screened information on each K-1 child in relation to visual and auditory acuity. The nurse was also asked to indicate the presence or absence of significant medical problems that could affect potential learning of each child. The visual acuity level is the sharpness or keenness of vision generally assessed by having the person read an eye chart at 20 feet. Normal vision is expressed as 20/20 (individual sees at 20 feet what the average person sees at 20 feet). Auditory acuity level is the keenness or acuteness of hearing best assessed with a pure tone audiometer. The audiometer is an auditory

screening instrument for detecting children who should be referred for a more thorough and intensive hearing examination. An abnormal auditory screening test is defined as failure to hear a pure tone sound in two of five sound frequencies at 35 decibels or higher in either ear. Significant medical problems are physical conditions that may interfere with school attendance or performance. In the broadest terms, significant medical problems on this form were: chronic pulmonary dysfunction, diabetes, cardiac disorder, neurological disorder, and musculoskeletal problem. A response category for "other" was also included.

Language screening form. Language plays a vital role in the learning process. Studies have shown that language disorders almost always result in a learning disability. One of the primary tasks involved in speech therapy is the identification of speech and language problems. The responses of Pass, Fail, or Not Screened were recorded for four levels of the Sentence Repetition Test used by speech therapists for the district. The four areas tested were articulation, language, non-fluencies, and voice problems. Errors in articulation are characterized by omissions, substitutions, distortions, and additions of speech sounds. Fail was equivalent to a score of 22 or below out of a possible score of 24 on target words. The child that may be having difficulty in understanding speech, in performing the motor act of speaking, in expressing thoughts, or in comprehending what is said, may have delayed language; a condition that could be indicative of a brain lesion. Fail was equivalent to a score of 10 or below out of a possible score of 14 syllables. At this level of the Sentence Repetition Test, the therapist was concerned with the correct sequence and number of syllables that a student repeated. The most common non-fluency is stuttering. Stuttering

is characterized by blocking, repetition, or prolongation of speech sounds, words, phrases, or syllables. Fail was equivalent to the notation by the therapist of this problem in a particular student. Defects which involve the voice include deviations of pitch, quality, or intensity. Fail was equivalent to the notation by the therapist of this problem in a particular student.

Procedure

A summary of the procedure involved with each instrument is discussed below. The actual instruments are presented in the appendix.

The parent and teacher checklists of development. The teachers of each child in the ten percent random sample of K-1 students were instructed to send home the parent checklist with the second six weeks report cards. The parents were instructed to fill out and return the checklist with the child's report card. Both the parent and teacher checklists were then returned to the Research and Evaluation Department. Responses on the Parent and Teacher Checklists were measured by a Likert Scale on a continuum from "Much Below Average" to "Much Above Average." These responses were transposed into computer-usable form. High risk was indicated by a response in the one or two categories: (1) Much Below Average, (2) A Little Below Average. A comparison was made across all instruments to see the relationship of the constructs on the Parent and Teacher Checklists of Development as they related to similar constructs on the other instruments.

The teacher observation survey. Responses to academic and/or behavior problems on the teacher observation survey were translated into computer-usable form. A trace was made from the teacher observation survey to the teacher checklist of development to see if those ran-

domly chosen children indicated as high risk on the teacher checklist of development were also included as potential learning and/or behavior problems on the system-wide teacher observation survey. If a teacher checked a student as high risk on the teacher checklist of development, the student should also have been included as high risk on the teacher observation survey indicating teacher understanding of what is a child with a potential learning problem.

The health and language screening forms. Responses to Pass, Fail, and Not Screened on the health and language screening forms were translated into a computer-usable language. The types of health and language problems represented in the District were calculated and a comparison was made among problems indicated by the speech therapists, school nurses, and teachers.

Results

An SPSS Codebook program and an SPSS Crosstabs program (Statistical Package for the Social Sciences, 1970) were used to calculate the descriptive statistics relavent to specific evaluation questions. Subprogram Codebook computes tables containing (1) simple frequencies, (2) relative frequencies with missing values included, and (3) adjusted relative frequencies with missing values excluded. Mean, median, mode, standard deviation, skewness, kurtosis, and range are also available by item for each screening instrument. The printed output from subprogram Crosstabs is designed to give a complete representation of joint frequency distributions in a readily understandable form. Tables may be analyzed by any combination of column percentages, row percentages, and percentages of the entire table.

The following reports methodology and results for evaluation questions giving the most pertinent information.

1. What percentage of students by grade, sex, and ethnicity were involved in the screening program across all screening tests?

This question is answered by each demographic characteristic below.

1.1 What percentage of students by grade were involved in the screening program?

The total number of students on which information was available across all tests was 7798. The majority of students (65.2%) were first graders in the 74-75 school year. Thirty-five percent of the population on which information was available were kindergarten students.

1.2 What percentage of students by sex were involved in the screening program?

Fifty-five percent of the students were male and 45.1% were female (based on N = 7798). Table 1 contains information on the percentage of students by sex involved in the screening program.

1.3 What percent of the K-1 population by ethnicity were involved in the program?

Thirty-five percent of the K-1 population were Anglo, 47% were black, and 17% were Mexican-American across all available information (N = 7798).

These percentages are comparable with the total district K-1 ethnicity percentages--Anglo-38.2%, Black-45.3%, and Mexican-American-15.8% (as of February, 1975).

3. What is the relationship between teacher responses and parent responses to the Checklist of Development?

Overall, teachers indicated a higher percentage (28.7%) of high risk categories than parents (18.1%). Common items with the greatest discrepancy with high percentage variability taken into account are listed in Table 2. The variables used in this study are defined in Table 1.

Although the within parent group items are indicated as the most high risk by response percentages commensurate with responses by teachers to their checklist, teachers indicated larger overall responses by items to the high risk categories. Early identification is hampered by a general lack of sophistication on the part of parents and teachers regarding the importance of developmental milestones and behaviors which may be expected of the child at each level. If a child appears to be below average in any of these areas, parents are likely to heed to the idea that "he/she will grow out of it." But, "what if he/she doesn't?" What if the child does appear to be growing out of it but at such a slow rate as to proclude readiness for success in the school setting?

3.1 Are there significant group mean differences between parent and teacher responses to the Parent and Teacher Checklists of Development?

A random sample of 100 students who had both teacher and parent checklist information was generated. A t-test for related measures was used to examine the significance of the difference between mean rankings for parent and teacher responses to their respective checklists (Table 3). Significant differences in mean responses in a negative direction were noted on the following items: hearing (seems to hear well); controls emotions as well as age-mates; and has physical or other health problems which interfere with moving about. Significant differences in mean

responses in a positive direction were noted on the item dealing with memory (remembers things he/she sees and hears).

4. What are the percentages of high risk K-1 students by category response to the Health Screening Information Form?

High risk was indicated by failure responses at any categorical level. The percentage of high risk for each category was as follows: Based on an N of 7798, the number of students on which information was available (the high risk population), the percentage of high risk for each category was as follows: Visual Acuity (N = 921, 11.8%), Hearing Acuity (N = 291, 3.7%), and Significant Medical Problems (N = 495, 6.8%). The total number not screened at the Visual Acuity level was 478 or 6.3%. The total not screened at the Hearing Acuity level was 1229 or 15.8%. These results were based on information obtained in March, 1975.

5. What was the percentage of high risk K-1 students by category responses to the Language Screening Information Form?

High risk was operationally defined as those K-1 students who failed one of the categories on the Language Screening Information Form. Based on an N of 7798 (the high risk population), percentages of language problems by categories are as follows: Articulation (N = 2412, 31%), Language (N = 777, 10%), Non-fluencies (N = 106, 1.4%), and Voice Problems (N = 249, 3.2%). The criterion for pass-fail was determined by score cut-off points at assigned levels by categories on the Sentence Repetition test. This test allows for dialectical differences, thus a student was not penalized for making a variation of sounds in his/her speech because of his/her dialect. The total proportion of high risk students in relation to the high risk population of 7798 that failed any category on the Sentence Repetition test was 42.3%. Inferring the total number

screened that failed the Sentence Repetition test (N = 3302) to the district population (N = 20,000), 16.5% of the K-1 population failed. Inferring the total number not screened (N = 242) to the total population, 1.2% of the population had not been screened at the time this information was collected in March, 1975.

6. What is the percentage of potential high risk K-1 students indicated by teacher response to the Teacher Observation Survey?

Teachers were asked to respond to the following questions: "List any students you feel may not be able to function at their potential due to academic and/or behavior problems." Based on an N of 7798, the percentages by problem areas are as follows: Academic (N = 952, 12.2%), Behavior (N = 286, 3.7%), and Academic plus Behavior (N = 382, 4.9%). These categories are matually exclusive. The total number of K-1 students indicated as having potential learning problems in school was 21% (based on an N of 7798). If it were assumed all K-1 teachers had responded to the survey, then only eight percent of the K-1 population (based on a ratio of total high risk responses to all categories--N = 1620 by the total K-1 population--N = 20,000) were being indicated as potential learning problems.

7. What school areas have the highest incidence of students with potential academic and/or behavior problems?

Area 4 had the highest number of high risk students across all tests (N = 3066). Area 1 had the highest number of high risk students according to Parent and Teacher checklists of development responses (Parent, N = 1310, Teacher, N = 1142). Area 4 had the highest number of students failing the Language Screening test (N = 1086), the Health Screening Form (N = 501), and the Teacher Observation Survey (N = 673).

Area I represents the Northwest Quadrant, Area II represents the Southwest Quadrant, Area III represents the East Quadrant, and Area IV represents Inner City school population of the Dallas Independent School District.

It was also noted that at certain schools with high risk responses to the Teacher Checklist of Development, there were no comparable responses on the Teacher Observation Survey. For example, in Area III, at one school, 18 students were identified by teachers and by parents on the parent-teacher checklists of development as high risk, but none of these students were listed on the Teacher Observation Survey which had zero responses to academic, behavior, and academic and behavior problems. This indicates a need for a staff development program in order to educate parents and teachers as to what type of developmental problems could be indicative of potential learning problems, thus contributing to potential educational exceptionalities in the classroom.

8. Given the criterion for the Teacher Observation Survey, how does the criterion relate to high risk responses on the Teacher Checklist of Development?

Items with the highest percentage (row total %) of relationship are presented in Table 4. The previous items in table 4 are indicating problems in the areas of speech, motor control, cognition, health problems, and social relationships. A follow-up on children pinpointed as potential problems based on this crosstabs would give the educator valuable information concerning underlying factors that are influencing a teacher's decision on whether or not a child is a potential academic and/or behavior problem, and also may have specific problems in developmental delays as indicated by responses on the teacher checklists of development. For example, a teacher marks a child as having trouble

controlling emotions and getting along with others and also marks him/her a behavior problem and an academic problem on the Teacher Observation Survey. What is the intuitive decision that the teacher is making here? Could the child's behavior be influencing problems in academic learning or could problems in academic learning be influencing problems in behavior? Children at this point would need a second level diagnostic program in order to further pinpoint why a teacher is responding to his/her screening in such a manner.

9. What is the relationship of Parent and Teacher Responses to responses on the Language Screening Form, Health Screening Form, and Teacher Observation Survey?

Table 5 gives the percentage of relationship among parent and teacher responses to the Parent and Teacher Checklists of Development with other screening instruments. For example, on item 6 (speaks as clearly as age-mates), 5.0% of the parents considered their children high risk in relation to the fail category on articulation (Language Screening Form) (Identified High Risk), while 13.8% of the parents considered their children average and above although they had received a fail response on the articulation test (Unidentified High Risk).

On item 20 (speaks as clearly as age-mates) teachers indicated 8.6% (N = 76) of their students were high risk in relation to their having failed articulation on the Sentence Repetition Test (Identified High Risk). However, 11.1% (N = 104) of the students were indicated by teachers as average and above average on item 20 although they had failed articulation on the Sentence Repetition Test (Unidentified High Risk). The relationship of responses among parents, teachers, school nurses, speech therapists can be readily inspected in Table 5 using the above examples as a guide. The data suggest a better communication needs to

be established among professionals on their results of screening categories for which they are responsible.

The results of this crosstabs shows the need to educate parents and teachers as to what learning problems are, how learning can be greatly affected by problems in the vision and auditory channels, problems with motor control, etc. If a child progresses through the early formal learning experiences with maximum visual, auditory and motor proficiency his chances for success are greatly enhanced. Parents and teachers must be aware that if a child has not developed these basic foundations for learning he will not achieve to his potential.

No child can succeed through failure, and success is difficult to achieve if the child is hampered by poorly developed skills in any of these areas.

Conclusions

The results of the study indicated an overall high risk percentage of approximately 22% which does approximate theoretical high risk percentages of potential learning problems specified by professionals in the field of special education (Conrad & Tobiessen, 1967; Fitzsimmons, Cheever, Leonard & Macunovich, 1969; Haring & Ridgeway, 1967).

Overall responses of teachers to high risk categories on the Teacher Checklist of Development indicated 28 percent of the K-1 population was below average[1] in relation to their age-mates on items describing development. Overall responses of parents to high risk categories on the Parent Checklist of Development indicated 18 percent of the K-1 population was below average in relation to their age-mates on items describing

development. A correlated t-test indicated no significant group mean differences in responses of teachers and parents except on certain items indicating developmental responses to hearing, memory, emotional stability, and health problems. Parents tended to rate their children lower than teachers on the significant difference items. At level one screening, the study considered responses on development from parent and teachers as predictive of potential learning problems. The question here would be: Of the range (18%-28%) of problems indicated by parents and teachers, are there significant developmental delays being considered? A level two diagnostic screening element and a longitudinal study would clarify this point.

[1]Descriptors such as "below average" refer to the code identifier for high risk on each item on the parent-teacher checklist of development.

One major point brought out in this study was the need for a staff orientation involving teachers and parents on functional aspects of potential learning problems as they relate to the classroom and home environment. In theory, those students indicated as high risk on the Teacher Checklist of Development should also have been indicated as potential high risk on the Teacher Observation Survey. However, cross-tabulation of Teacher Observation Survey frequencies by total item high risk responses on the Teacher Checklist of Development indicated only 482 joint responses. The total frequency of high risk responses on the Teacher Checklist of Development across all items was 2243. Why were high risk responses not more comparable between these two instruments? Part of the problem could have been the type of communication used to obtain the responses, but the major discrepancy could have been due to lack of a specific and practical definition of learning problems.

A summary of research has shown consistently that most referrals of high-risk children originate with the classroom teacher (Keogh, 1973). The question here, however, centers around the accuracy of classroom teachers in differentiating among groups of high risk children. Are teachers sensitive to what may be a child with potential emotional problems? Is a child being labeled "academic problem" when there are in fact underlying behavior problems that could be contributing to learning problems in academic areas. For example, in this present study, children were being pinpointed by teachers as having behavior and academic problems, but these same children had failed visual acuity or hearing acuity on the health screening, or had failed one of the categories on the language screening form. The results indicate that teachers do have difficulty in further delineating within a high-risk group. In spite of the conclusions that teachers are key people in the identification process, the basis of their judgments is still unclear. Understanding teachers' perceptions and having teachers understand the reasoning of their perceptions of the high risk child is an important area that could be assisted through supportive services and staff orientation. Clear understanding of availability of special educational services and programs is also essential, since the weight of the first screening lies with teachers in regular classrooms. Teachers need to have access to all pertinent information. Identifying those factors that contribute to teachers' perceptions of high risk students and assisting teachers in understanding those factors involved appear to be worthwhile areas for further staff orientation.

The major high risk items indicated across the Parent and Teacher

Checklists of Development regardless of grade, sex, and relationships with other tests were item 6 (speaks as clearly as age-mates), 7 (knows as many words as age-mates), 10 (balance and coordination), 11 (remembers things he sees and hears), and 13 (controls emotions as well as age-mates). These responses indicate possible developmental delays with respect to language motor coordination, memory, and emotional stability. Second level screening could place an emphasis on probing possible learning problems reflected by high risk scores in these areas. More formal tests could be given to students identified in these areas and factor analysis procedures used to see if the specific items on the checklist indicating high risk loaded on factors comparable to high risk identified by the formal screening instruments.

In examining the relationships of Teacher Observation Survey responses with other screening instruments, the underlying perceptions of the professionals involved towards potential learning problems have been captured. For example, items with the highest relationship on the Teacher Checklist of Development as they relate to the Teacher Observation Survey categories of academic, behavior, and academic and behavior have been identified--items 20 (speaks as clearly as age-mates), 21 (knows as many words as age-mates), and 25 (remembers things he sees and hears). These items all had significant chi squares at the $p < .05$ level. Approximately 42% of those students failing the articulation category on the Sentence Repetition Test were also being identified as potential academic problems, 34% as potential behavior problems and 45% as potential academic and behavior problems.

Behavior problems are often associated with hearing problems and

language problems. These results may be indicating that children who, because of language problems and actual visual and auditory problems, are being identified by teachers as potential high risk. Again the question under consideration here is, "What kind of information sharing is there between the classroom teacher, the speech therapist, and the school nurse?" Would a staff orientation program assist in relating the characteristics of potential learning problems to the staff? What type of potential learning problem distribution would then be the case based on a staff that had received orientation on instruments that had been developed to pinpoint the possible problem areas, on an analysis that further specified the significance of such a program?

By identifying learning problems based on behavioral criteria and relating it to the Dallas population, professionals in the District will be identifying problems specific to their system and not to some "norm."

Most teachers agree that problems begin in the early years of a child's life. Studies have noted that potential high school dropouts and problem learners showed signs of learning and behavior problems by the third grade (Fitzsimmons, 1969). And by the time a child's learning deficit is discovered in the third grade, many of his behavior patterns and self-concept are already set. Poor school performance feeds poor self-concept which, in turn, feeds poor school performance. It seems reasonable that the best place to stop in such a hard to break failure cycle is in its first stages.

Recommendations

Phase One of Project H.E.L.P. was to obtain a description of the K-1 population as it relates to certain high risk factors on various screening

instruments. The study was not designed to provide information for conclusive judgements and decisions, but as an investigative study - based on the information obtained from this gross screening phase, the following recommendations were made.

Projected Information Retrieval System

Project H.E.L.P. represents the first step in a screening program implementing a data information retrieval system; a system most important when dealing with such a large N as DISD represents. A tape was created that contained demographic, health screening, speech screening, and behavior observation information. It was felt that this system will assist in establishing better liaison among various levels of professional input by making each professional source an integral part of an overall delivery system. It represents the first step in a matching profile program where sophisticated statistical analysis could be made possible to determine types of learning problems being identified in a screening/diagnostic/assessment program. A dynamic process of an information retrieval cycle and follow-up has been suggested through the establishment of a Project H.E.L.P. data base system. A dynamic and continuing evaluation of each child has been made possible through the establishment of such a data base system; a system with a build-in regulatory mechanism which also consistently, evaluates the instruments and processes being used to determine a child's learning problem. Such a program will also facilitate the objectives of quality research and diagnostic/assessment services. A baseline for longitudinal research has also been established in which children designated as having potential problems can be followed through their school years to see if in fact, the correct diagnostic was made, or if it is time for a recycling of the child's program.

A well-developed data collection and retrieval system in special education would allow administrators to make decisions concerning program funding management, and evaluation based on objective information. The data such a system could supply would provide a basis for developing cost benefit analyses and measuring and appraising program quality and successfully attained goals. These data would allow better communication among professionals in special education and eliminate much current repetition in reporting.

Proposed Diagnostic/Assessment Center

It is recommended that Project H.E.L.P. be interfaced with a proposed diagnostic/assessment center in the following manner. The children identified as having potential learning problems by Project H.E.L.P.'s information retrieval system and Psychological Services evaluation, would alert a staff within the proposed diagnostic center for children that needed to be processed through their system for diagnostic/assessment/follow-up evaluation. A preliminary staffing based on Project H.E.L.P. information would take place. Secondary level screening instruments such as Myklebust's Pupil Rating Scale, CHILD-Childhood Identification of Learning Disabilities, Kindergarten Auditory Screening Tests, would be administered to those students identified at Level I as having possible learning problems. System-wide testing information (Metropolitan Readiness Test for 1st graders for example) would also be taken into account.

Based on preliminary staffing that would take into account the above information, decisions would be made as to the types of formal/informal testing that would be needed for each child.

The child would then be taken to a precision teaching center where a co-ordination in his program between the diagnostic center assessment and actual implementation of a prescriptive program would be made in the form of a pilot trial. The child would then receive a final staffing from the diagnostic center staff and his program set up in more specific prescriptive term based on the pilot study information. A continuing, dynamic assessment would be one of the most important aspects of such a center. Continuing learning assessment probes would make the educational diagnostician immediately aware of a breakdown in a child's learning process. At this point, the staff would pinpoint the reason behind the breakdown - Failure to communicate to the teacher a child or specific needs, failure of teacher to carry-out full prescriptive program, actual breakdown in a child's learning process. If it was the latter, the child would be recycled for further assessment/prescriptions which would then be re-implemented. Once the education problem had been assessed with an appropriate remedial program developed, then the child could be mainstreamed back into a Plan A situation with the final goal being to return to the regular classroom.

Proposed In-Service Training Program

One major implication of Project H.E.L.P. before a system-wide screening program can be established is the essential need for a good staff development program. This could also be implemented through a diagnostic/precision teaching center approach. The teacher would attend an in-service program geared to alert her to characteristics in young children that could be significant predictors of potential learning problems. She would be instructed in the proper use and write-up

of such teacher observation instruments as the Myklebust; CHILD, KAT, etc. Additional training would be provided by the diagnostic/precision teaching center to teachers not knowing what characteristics are indicative of potential learning problems in children.

On the basis of the results of this study, three major recommendations are proposed.

(1) The District broaden and expand orientation programs for regular class teachers to provide more comprehensive information about (a) behavioral and educational characteristics of children who are high risk in school programs; (b) District facilities and resources for special help for high risk pupils.

(2) The screening program needs to be based on a dynamic recycling program. (Interaction of a child with instructional variables and situational effects is an ever-changing process.)

(3) The District needs to establish a better information sharing among professionals as to the high risk information they find on their evaluation reports. The establishment of an information retrieval system as discussed in Project H.E.L.P. - Data Base Report (No. 75-598), could assist in fostering interdependency and interfacing among all levels of administrators, teachers, and diagnostic/assessment staffs.

Table 1

Variable Listings

Variable

1 Grade, Response Code: (1) Kindergarten, (2) 1st grade

2 Sex, Response Code: (1) Male, (2) Female

3 Ethnicity, Response Code: (1) Anglo, (2) Black, (3) Mexican-American

4 Parent Checklist of Development, Vision

5 Parent Checklist of Development, Hearing

6 Parent Checklist of Development, Speaking

7 Parent Checklist of Development, Knows words

8 Parent Checklist of Development, Feeds self

9 Parent Checklist of Development, Dresses self

10 Parent Checklist of Development, Balance and coordination

11 Parent Checklist of Development, Memory

12 Parent Checklist of Development, Gets along well

13 Parent Checklist of Development, Controls emotions

14 Parent Checklist of Development, Able to sit and watch T.V.

15 Parent Checklist of Development, Energy and physical activity

Response Codes for 4-15:

(1) Much Below Average, (2) A Little Below Average, (3) Average, (4) A Little Above Average, (5) Much Above Average.

16 Parent Checklist of Development, Physical or other health problems

Response Codes: (1) Yes, (2) Maybe, (3) No.

17 Parent Checklist of Development, Language spoken in home

Response Code: (1) English, (2) Spanish, (3) Other.

Variable

18 Teacher Checklist of Development, Vision

19 Teacher Checklist of Development, Hearing

20 Teacher Checklist of Development, Speaking

21 Teacher Checklist of Development, Knows words

22 Teacher Checklist of Development, Feeds self

23 Teacher Checklist of Development, Dresses self

24 Teacher Checklist of Development, Balance and coordination

25 Teacher Checklist of Development, Memory

26 Teacher Checklist of Development, Gets along well

27 Teacher Checklist of Development, Controls emotions

28 Teacher Checklist of Development, Able to sit and watch T.V.

29 Teacher Checklist of Development, Energy and physical activity

Response Codes for 18-29:

(1) Much Below Average, (2) A Little Below Average, (3) Average, (4) A Little Above Average, (5) Much Above Average.

30 Teacher Checklist of Development, Physical or other health problems

Response Codes: (1) Yes, (2) Maybe, (3) No.

31 Teacher Checklist of Development, Language spoken in the home

Response Codes: (1) English, (2) Spanish, (3) Other.

32 Language Screening Information, Articulation

33 Language Screening Information, Language

34 Language Screening Information, Non-fluencies

35 Language Screening Information, Voice problems

Variable

Response Codes for 32-35:

(1) Pass, (2) Fail, (3) Failed because of Spanish dialect problems, (4) Not screened.

36 Health Screening Information, Visual Acuity

37 Health Screening Information, Hearing Acuity

38 Health Screening Information, Significant medical problems$_1$

39 Health Screening Information, Significant medical problems$_2$

Response Codes for 36-37:

(1) Pass, (2) Fail, (3) Not Screened.

Response Codes for 38-39:

(1) Pass, (2) P = Chronic pulmonary dysfunction, (3) D = Diabetes, (4) C = Cardiac disorder, (5) N = Neurological disorder, (6) M = Muscular skeletal problem, (7) O = Other.

40 Teacher Observation Survey, Academic problems

Behavior problems

Academic and Behavior problems

Table 2

Common Items Between the Parent and Teacher Group with the Greatest Response Discrepancy

Parent		Teacher	PN	P%	TN	T%
6	Speaking	20	209	11.3	334	25.5
7	Knows words	21	138	10.3	353	27.0
10	Balance and Coordination	24	111	8.4	173	13.1
11	Memory	25	75	5.6	304	23.2
12	Gets along well	26	99	7.4	141	10.7
14	Able to sit, watch TV	28	72	5.3	174	13.4
15	Energy and physical activity	29	57	4.4	138	10.5
	TOTAL		1397	18.1	2241	28.7

Table 3

T-test results on Group Mean Differences for Parent and Teacher Checklist Responses (N = 100)

Parent	Item	Teacher	Parent	Teacher	Difference	t
4	Vision	18	2.95	3.10	-.150	-1.53
5	Hearing	19	2.86	3.14	-.280	-2.73[1]
6	Speaking	20	3.01	3.04	-.030	-0.27
7	Knows words	21	3.09	3.00	.090	0.66
8	Feeds self	22	3.23	3.40	-.170	-1.41
9	Dresses self	23	3.23	3.32	-.090	-0.78
10	Balance and Coordination	24	3.05	3.22	-.170	-1.47
11	Memory	25	3.51	3.22	.290	2.35[1]
12	Gets along well	26	3.12	3.29	-.170	-1.63
13	Controls emotions	27	2.87	3.26	-.390	-3.77[1]
14	Able to sit, watch TV	28	3.51	3.32	.190	1.29
15	Energy and physical activity	29	3.17	3.21	-.040	0.30
16	Physical, other health problems	30	2.58	2.88	-.300	-3.28[2]
17	Language spoken in home	31	0.93	1.01	-.080	-1.91[2]

[1]Significant at the $p < .05$ level.

[2]Due to robustness of t-test, the results on this item are not affected by its response order.

Table 4

Crosstabulation of High Risk Items for the Teacher Checklist of Development across all Responses[1] to the Teacher Observation Survey

Item	Description	(1)[2]	Row Total %[3]	(2)	Row Total %
20.	Speaks as clearly as age-mates		20.2		34.6
21.	Knows as many words as age-mates		26.9		42.3
23.	Dresses self		1.9		20.4
24.	Balance and Coordination		8.6		22.9
25.	Memory		22.1		46.2
26.	Gets along well		8.7		21.2
27.	Controls emotions		14.3		26.7
28.	Able to sit, watch TV		11.8		33.3
29.	Energy and physical activity		6.7		21.9
30.	Physical, other health problems		8.7		23.1

[1] Responses to the Teacher Observation Survey.

[2] Response Codes are: (1) Much Below Average, (2) Little Below Average.

[3] Refer to description of CROSSTABS terms at the beginning of the report.

Table 5

Example of the Type of Information Obtained From a Crosstabulation of Parent and Teacher Checklists of Development by Identified and Unidentified High Risk Items on Related Screening Instruments

Parent/Teacher Checklist	Related Screening Instruments[1]	Instrument Code[2]	Identified High Risk (f)[3]	Total %[4]	Unidentified High Risk (f)	Total %
ITEM						
1. Vision	36. Visual Acuity	D	15	1.6	37	3.9
	40[5]	E	13	12.4	92	88.0
2. Hearing	32. Articulation	C	16	1.7	158	16.3
	33. Language	C	9	1.0	38	4.0
	37 & 38 Significant med. problems	D	15	1.5	43	32.6
	40.	E	15	14.5	89	86.0
3. Speaking	32. Articulation	C	71	8.6	104	11.1
	33. Language	C	24	2.5	23	2.4
	34.	C	4	.4	7	.7
	35. Voice problems	C	4	.4	6	.6
	37 & 38 Significant med. problems	D	22	2.1	40	4.3
	40.	E	57	54.8	47	45.4
4. Knows words	32. Articulation	C	54	5.8	119	12.8
	33. Language	C	25	2.7	22	2.3
	40.	E	72	69.2	32	29.8
5. Physical and other health problems	38.	D	5	.5	23	2.5
	40.	E	33	31.8	71	68.3

[1]Parent and teacher checklist items by related screening instrument items.
[2]Instrument Codes: A - Parent Checklist, B - Teacher Checklist, C - Language Screening, D - Health Screening, E - Teacher Observation.
[3]Absolute frequency or cell count (N).
[4]Total percentage (cell count by row and column total).
[5]Responses to Teacher Observation Survey collapsed for purposes of analysis.

References

Capobianco, R. Diagnostic methods used with learning disability cases. Exceptional Children, 1964, 31, 187-194.

Cobb, J. Relationship of discrete classroom behaviors to fourth-grade academic achievement. Journal of Educational Psychology, 1972, 63, 74-80.

Deno, E. Some reflections on the use and interpretation of tests for teachers. Focus on Exceptional Children, 1971, 2 (8), 1-14.

Ensminger, E. A proposed model for selecting, modifying, or developing instructional material for handicapped children. Focus on Exceptional Children, 1970, 1 (9), 1-9.

Fargo, G., Roth C. & Cade. T. Evaluation of an interdisciplinary approach to prevention of early school failure. Technical Report, University of Hawaii, 1968.

Hainsworth, P. and Siqueland, M. Early identification of children with learning disabilities: The meeting street school screening test. Crippled Children and Adults of Rhode Island, Inc., 1969.

Handbook. The operation of programs for language handicapped children, Texas Education Agency, Houston, Texas, 1973.

Hansen, P. Educationally handicapped programs in selected school districts of Southern California. Unpublished doctoral dissertation, University of California, Los Angeles, 1970.

Haring, N. & Ridgway, R. Early identification of children with learning disabilities. Exceptional Children, 1967, 33, 387-395.

Keogh, B. Early identification of children with learning disorders. Exceptional Child, 40 (1), 1973, 287-301.

Keogh, B. Psychological evaluation of exceptional children: Old hangups and new directions. Journal of School Psychology, 1972, 10 (2),

Keogh, B., Becker, L., Kukic, M. & Kukic, S. Program for EH and EMR pupils; review and recommendations. Technical Report, University of California, Los Angeles, 1972.

Keogh, B. & Tchir, C. Teachers' perceptions of educationally high-risk children. Technical Report, University of California, Los Angeles, 1972.

Kosinski, Sharon. Project H.E.L.P. Highlighting Early Learning Problems. Research Report No. 75-597, Dallas Independent School District.

Lahaderne, H. Attitudinal and intellectual correlates of attention: a study of four sixth-grade classrooms. Journal of Educational Psychology, 1968, 59, 320-324.

References (continued)

Lerner, J. Children with learning disabilities. Boston: Houghton Mifflin Company, 1971.

Medvedeff, E. and Dearth, B. New dimensions in learning, Iowa City, Iowa: Westinghouse Learning Corporation, 1974.

Nie, N., Bent, D., & Hull, C. SPSS - Statistical package for the social Sciences, New York: McGraw-Hill Book Company, 1970.

Spivak, G., Swift, M. & Prewitt, J. Syndromes of disturbed classroom behavior: A behavioral diagnostic system for elementary schools. Journal of Special Education, 1971, 5, 269-292.

Westman, J., Rice, D. & Bermann, E. Nursery school behavior and later school adjustment. American Journal of Orthopsychiatry, 1967, 37, 725-732.

Zehrbach, R. Determining a preschool handicapped population. Exceptional Children, 42, (2), October, 1975.

APPENDICES

Checklist of Development

For each of the items, circle the number in one of the 5 columns which most nearly applies to your child as compared to playmates of same age (age mates). Please fill out either this side (English) or the other side (Spanish) and return with report card.

	Much Below Average	A Little Below Average	Average	A Little Above Average	Much Above Average
34. Vision (seems to see well)	1	2	3	4	5
35. Hearing (seems to hear well)	1	2	3	4	5
36. Speaks as clearly as age mates	1	2	3	4	5
37. Knows as many words as age mates	1	2	3	4	5
38. Feeding self and caring for toilet needs (as well as age mates)	1	2	3	4	5
39. Dresses self as well as age mates	1	2	3	4	5
40. Balance and coordination as good as age mates (not clumsy)	1	2	3	4	5
41. Remembers things he hears and sees	1	2	3	4	5
42. Gets along with same age playmates	1	2	3	4	5
43. Controls emotions as well as age mates	1	2	3	4	5
44. Able to sit and watch T.V. cartoons as long as age mates (10-15 minutes) (Teachers: consider attention span)	1	2	3	4	5
45. Energy and physical activity (too much or too little)	1	2	3	4	5

46. Has physical or other health problem which intereres with moving about, sitting in a chair, or coloring with crayons — yes (1) Maybe (2) no (3)

47. Language spoken most of the time (more than half) in the home — ___English (1) ___Spanish (2) ___Other (3)

(Teachers: substitute "class" for "home")

Significant Medical
Problems (P-O)
Alphabetical Code

P=Chronic pulmonary dysfunction
D=Diabetes
C=Cardiac disorder
N=Neurological disorder
M=Muscular skeletal problem
O=Other (Problems anticipated that could affect learning)

Failed = F

Not screened = NS
(absent; illness,etc)

HEALTH SCREENING INFORMATION AT THE GROSS IDENTIFICATION LEVEL
K-1st grade students

Student Name	Student ID#	Possible Health Problems					
		Visual Acuity		Hearing Acuity		Significant Medical Problems	
1.	2.	3.	4.	5.	6.	7.	8.
		F	NS	F	NS	Positive (refer to alphabetical code)	No Information

DIRECTIONS: Please do not use X's or ✓'s; use the alphabetical code listings at the top of the page. For 3 and 5, mark "F" if student Failed this section. For 4, 5, and 8, mark "NS" if student was not screened. For 7, use alphabetical code (as shown in left-hand column above). Positive (under sig. med. problem #7) means signs were present for significant medical problem(s) that could affect potential learning in that student. The one or two most significant medical problem(s) that could affect learning should be listed under 7 according to their alphabetical code. For K-1 students only. Please complete this form immediately and send to Mrs. Stella Clapp, Box 96, DISD, by mail-in, Wed., April 9th; walk-in, no later than Friday, April 11th. Thank you for your help..

School Name _____ School Code _____ Nurse's Signature _____ Date _____

LANGUAGE SCREENING INFORMATION AT THE GROSS IDENTIFICATION LEVEL

School Address

Speech Therapist

Student Name	Student No.	Possible Speech Problems											
		Articulation			Language			Non-fluencies			Voice Problems		
		P	F	NS	P	F	NS	P	F	NS	P	F	NS

Sentence Repetition Test

P-Passed
F-Failed
NS-Not Screened

Speech Therapist's Signature Date