## University of Montana

# ScholarWorks at University of Montana

Graduate Student Theses, Dissertations, & Professional Papers

**Graduate School** 

1984

# Performance of Blackfeet Indian children on the Fluharty Preschool Speech and Language Screening Test

Margaret I. Strobbe The University of Montana

Follow this and additional works at: https://scholarworks.umt.edu/etd

# Let us know how access to this document benefits you.

#### **Recommended Citation**

Strobbe, Margaret I., "Performance of Blackfeet Indian children on the Fluharty Preschool Speech and Language Screening Test" (1984). *Graduate Student Theses, Dissertations, & Professional Papers.* 7798. https://scholarworks.umt.edu/etd/7798

This Thesis is brought to you for free and open access by the Graduate School at ScholarWorks at University of Montana. It has been accepted for inclusion in Graduate Student Theses, Dissertations, & Professional Papers by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.

# COPYRIGHT ACT OF 1976

THIS IS AN UNPUBLISHED MANUSCRIPT IN WHICH COPYRIGHT SUB-SISTS. ANY FURTHER REPRINTING OF ITS CONTENTS MUST BE APPROVED BY THE AUTHOR.

> Mansfield Library University of Montana

DATE: 1984



BY

Margaret I. Strobbe

B.S., Miami University, 1976

## An Abstract

Of a thesis submitted in partial fulfillment of requirements for the degree in Master of Arts in the Department of Comunication Sciences and Disorders in the Graduate School of the University of Montana

June, 1984

Approved by:	Barbara Bain
·	Chairman, Board of Examiners
_	Dean, Graduate School
	Dean, Graduate School
	5/3/84
	Date

UMI Number: EP38599

## All rights reserved

#### INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



#### UMI EP38599

Published by ProQuest LLC (2013). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.
All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code



ProQuest LLC. 789 East Eisenhower Parkway P.O. Box 1346 Ann Arbor, MI 48106 - 1346 Strobbe, Margaret I., June, 1984 Communication Sciences/Disorders

The Performance of Blackfeet Indian Children on the Fluharty Preschool Speech and Language Screening Test (89 pages)

Director: Barbara A. Bain, Ph. D.

The purpose of this study was (1) to determine if the Fluharty Preschool Speech and Language Screening Test (FPSLST) would accurately identify kindergarten children in Browning, Montana who required intervention for speech/language problems, and (2) to determine if the performance of kindergarten children in Browning, Montana differed from the performance of the children in the standardization group. Kindergarten children in Browning, Montana who met specific criteria were administered the FPSLST. The results of the subjects on the test were compared to the results of diagnostic testing. Findings indicated the (1) the children in Browning, Mt. performed the same as children in the standardization group except for the five year old group on one section of the test; and (2) although the performances were essentially the same, the results revealed a significant but low relationship between the results on the FPSLST and the need for intervention, with most error identifications being false positives. This low relationship was discussed in terms of (1) differing diagnostic testing and entrance criteria used to determine student eligible for therapy in each study, (2) the possible use of a single test battery to determine both cut off scores and validity for the FPSLST, and (3) the interpretation of pass or fail on items on the test. The clinical significance of the overidentification rate was terms of efficiency and usefulness in practical discussed in application. Caution was suggested if the FPSLST was considered as the tool to predict students in need of intervention.

bу

Margaret I. Strobbe

B. S., Miami University, 1976

Submitted in partial fulfillment of the requirements for the degree of Master of Arts in the Department of Communication Sciences and Disorders in the Graduate School of the University of Montana

June, 1984

Approved by:

Chairman, Board of Examiners

Date

#### ACKNOWLEDGEMENTS

Much gratitude is due to the members of the committee who made this academic experience possible: to Dr. Boehmler for his thought provoking questions; to Nancy Connell for her insight into public schools; to Dr. Wesley Shellen for his patience in reviewing the statistics for this project; and special gratitude to my thesis director, Dr. Barbara Bain, who spent countless hours on many "offduty" times reading and reviewing this thesis-Her time and patience are unmeasurable.

This author wishes to thank the School Board of Browning Public Schools for allowing me to complete this project. I also wish to thank the students and teachers in Browning who made this possible.

Special thanks must go to many friends who offered support and assistance with this thesis. I wish to thank Joan, Dave, Shawn, and Ryan Fitzpatrick who offered their home and support when I needed to travel for meetings on the thesis. I also wish to thank Lucy Bikulcs for her professional insights into the issues in this thesis, and for her valuable "listening ear" when things seemed low. Many thanks go to Lynn Farrier for her inspiration. Many, Many friends in East Glacier have struggled along with me through the thesis process-to them go many thanks.

Thanks go to Ray Landseidel of Emery Computers. Ray helped me to learn all about the magic of the computer. Without his help, I would still be typing this thesis.

Finally, this author wishes to thank her family for making the completion of this project possible. Special love and thanks go to my son, Shane Strobbe for his unending patience. The assistance of my husband, Rudy R. Strobbe, Jr. can never be repaid. His support, love, and patience mean more to me than I can ever write in an acknowledgement section.

# TABLE OF CONTENTS

ABSTRACT	ĹÍ
ACKNOWLEDGEMENTS	İ٦
LIST OF TABLES vi	Ĺi
INTRODUCTION	1
METHODS	l 1
RESULTS	13
DISCUSSION	20
REFERENCES	<b>3</b> C
APPENDICES	3 5
Appendix I: Hearing Screening Criteria	35
Appendix II: Raw Data	37
Appendix IIa: Subjects included 4	<b>∔</b> 3
Appendix IIb: Students excluded 6	5 1
Appendix III: Test Administration and Secring 7	77

# LIST OF TABLES

Table	Page
1. Inter-Examiner Reliability	13
2. Summary of False Negatives, False Positives, and Accurate Predictions	15
3. Summary of False Positives and False Negatives	16
4. Analysis of Errors made on the Expressive Section	17
5. Means, Standard Deviations, F Ratios and F Probabiliies for 5 and 6 year old students in Browning, Mt. and for	
the standardization group on the FPSLST	18

#### CHAPTER I

One task facing the speech and language clinician in the public schools is the early identification of children who may have articulation and language disorders. One way to identify such children is to administer a screening test to all children when they begin their school experience. One screening instrument reported to be appropriate for children at that age is <a href="The Fluharty Preschool Speech and Language Screening Test">The Fluharty Preschool</a> Speech and Language Screening Test (FPSLST) (Fluharty; 1978). The purposes of this study were to:

- 1. Determine, using the published norms, the accuracy with which the <u>FPSLST</u> (1978) identifies kindergarten children in Browning, Montana who have articulation and/or language disorders;
- 2. Establish local norms on the FPSLST (1978) for kindergarten children in Browning, Montana; and
- 3. Compare the obtained local norms to the published norms.

Next, the rationale for this study will be presented. Predictive validity and the need for local norms will be the thrust of the discussion.

# Predictive Validity

In general, predictive validity examines an instrument's ability to accurately measure what it is intended to measure (Bormann, 1965). An articulation and language screening test must locate children who indeed evidence the need for intervention without identifying a large number of children who do not require such intervention. In order for a screening test to accurately identify children who need intervention, it must evaluate skills necessary for communication

which will then later be assessed in-depth should a complete assessment be indicated by failure on the screening test.

The <u>FPSLST</u> assesses four aspects which are important to communication. These aspects include (1) vocabulary, (2) articulation, (3) language comprehension, and (4) language expression. These are also four aspects frequently evaluated during a diagnostic assessment of communication skills (Johnson, Darley, and Spriestersbach, 1963; Nation and Aram, 1977).

The reported ability of the <u>FPSLST</u> to accurately identify children who may need intervention was based on the performance of 211 children from the standardization group. Fluharty (1974) indicated that "The correlation between each child's screening test performance (pass/fail) and the implications of his or her speech evaluation (needs therapy/does not need therapy) was computed at .897 by the Pearson product-moment correlation" (<u>FPSLST</u> Guide; Fluharty; 1978; p.15). This indicated that the <u>FPSLST</u> was accurate in predicting those children from the standardization group in need of intervention.

The <u>FPSLST</u> (1978) is reported to be useful as it (1) evaluates aspects important to communication which are often assessed during the evaluation and (2) accurately identifies children in need of remediation (Fluharty; 1978). This particular tool has only been demonstrated to be predictive for those children in the standardization group. Research is needed to determine if the <u>FPSLST</u> (1978) identifies children in need of remediation in group which differ in some way from the group used for standardization.

# The Speech/Language Community

Articulation and language disorders are in part defined by deviation from the local community articulation and language patterns. Speech and language clinicians must be able to describe the usual language behavior of the community in which they work in order to identify disorders within that group (Evard and Sabers, 1979; Yoder, 1970 in Williams 1970; Task Force on Teaching English to Disadvantaged Children, 1965). This is particularly necessary if that community consists of a cultural or minority group whose language rules and patterns have the potential to be unique and/or distinct from those of Standard English (SE).

Much of the research regarding language patterns which are unique to specific groups has focused on the language of Black children while very little research has been directed towards the English patterns used by Native Americans or children living on Indian Reservations (Yoder, 1970). On the issue of unique patterns, Evard and Sabers (1979,p.272) noted:

of certain specific cultures-particularly economically disadvantaged black children-possess phonological, morphological, syntactical, and semantic patterns different from those used in SE (Bailey, 1965; Baratz and Povich, 1967; Lobov 1970a; and Fasold and Wolfram, 1970). These dialectal patterns incorporate a consistent and fully developed linguistic system with predictable rules (Baratz, 1968; Stewart, 1968; and Lobov, 1970b)....

Whether such language pattern differences occur in the English of Native Americans is unknown at this time. Therefore, the issue at hand is to identify those language patterns of Native Americans which

may be "the result of natural dialectal patterns that should not be described as either deficient or abnormal". (Evard and Sabers, 1977). Yoder (Williams, 1970) described the quandary when he stated, "we need massive research into the different varieties of non-standard English."

# Communication of the Community and Articulation and Language Disorders

Should a unique language community be delineated, the need for identifying children with problems within that community is not negated. Evard and Sabers (1979) indicated:

The existence, however, of a distinct language system within an ethnic-racial culture does not preclude the necessity of identifying children with multiple misarticulation or language disorders including aphasia. As those children who depart markedly from the dialectal pattern of their subculture; for example, those children who, within the dialectal framework oversimplify most consonant clusters or drop more final consonants than is normal for the dialect. Furthermore, it is necessary to identify those children within a particular group whose communication is impaired by an articulation or language disorder. (1979, p. 272).

The process of identification becomes more accurate, and one can more clearly discriminate disorder from difference, when the performance of the community is delineated. Performance must be described in relation to the speech of the community. (Yoder, 1970; Menyuk, 1970).

The Task Force on Teaching English to the Disadvantaged of the National Council of Teachers of English (1965) stated the problem explicitly and noted that a deviation from the majority norm is not a problem particularly if a child is able to use his/her language

patterns and skills to think, learn, and relate ideas. The task force discussed non-standard English in relation to preschoolers, and concluded that the important issue was learning to express oneself and deal with language conceptually, rather than knowing an English established by the majority culture. Given a cultural or minority community such as a Native American group living on a reservation, one must define the structures of the linguistic community. Are the language patterns and styles different from Standard English, and if so, how? An accurate description of the language performance of a given community is necessary in order to accurately define what constitutes an articulation and language problem, and to accurately identify children who even within their own language community are experiencing communication handicaps.

# The Establishment of Local Norms

One method advocated to determine the language performance of a community or group of people is to establish local norms on an already existing test (Evard and Sabers, 1979; Hubbel, 1981). The examiner is thus able to determine the normal language performance for a given community as well as identify differences across cultures. Researchers have attempted to delineate the performance of minority or cultural groups (Mechan, 1978; Ramstead and Potter, 1974; Welyle et al., 1980). Most speech and language testing with minority or cultural groups has been completed in a certain geographical area with a specific minority group making the application to another area or specific group suspect. Even though some speech and language tests attempt to sample different racial and ethnic backgrounds when

Rather, they are heterogeneous and are composed of individual sectors which may vary significantly in terms of living conditions, exposure to Standard English, number and type of languages spoken, experiences, educational levels, etc.

Indian children living on the Blackfeet Indian Reservation were not one of specific groups or areas included in the standardization population of the <u>FPSLST</u> (1974). This language community of the Blackfeet Indian Reservation, therefore, warrants attention and study to best understand the nature and complexity of the communication system. The establishment of norms for this local language community can enable a speech and language clinician to best serve the needs of children within the community who are experiencing difficulty with language.

# Test Taking Behavior and Its Relation to Group Comparisons

A specific sample group may differ from the standardization group not only in terms of their language and articulation patterns, but also in terms of the way they react to a tester and/or a testing situation. Minority groups have demonstrated differences from middle-class, white peers in test taking styles. Golub (1975) in assessing the writing skills of Indian children found that they worked as though indifferent to the task, while still completing the task efficiently and completely. Lobov (1975) in evaluating oral language skills, indicated that a white interviewer found less verbal output during testing than what actually occured when the minority children talked among themselves. Fishman, Deutsch, Kogan, North, and Whiteman (1974)

noted that "a disadvantaged child's test performance may be affected by poor skills in test taking, a disruptive level of anxiety, lowered motivation to perform well on tasks, less concern with speed, poorer understanding of test instructions, unfamiliarity with format and poorer rapport with the examiner" (in Williams, 1970; p. 321). These differences in test behaviors may cause a group to perform in a manner different than the sample used to standardize a given test. Severson and Guest (1970 in Williams 1970) stated:

...the possibility that a number of test related factors affect test performance looms large. Such factors may impair the predictive validity of tests, and the possibility of their influence should be recognized when interpreting results. (p. 323).

The results of the above cited research indicated that test taking behaviors or styles may be unique to specific cultures or minority groups. Consequently, these styles may influence test performance, and thus make comparisons between the scores of a unique group to the group used in standardization unjustified when determining the need for intervention.

# Conflicting Results of Language Testing with Minroity and Low SES Groups

In order to accurately identify individuals who may require remediation for articulation and/or language disorders, the normal language and style of a minority sample group must be ascertained. Studies of minority, culturally different and low SES groups, however, yield conflicting results regarding language usage and language development. Three aspects which have been reported to differ include

(1) the rate of language acquisition, (2) vocabulary usage, and (3) the use of syntactic structures.

The results of research regarding this first aspect, rate of language acquisition, received different interpretations in the literature. Some researchers found the language acquisition rate of minority groups to be similar to white middle class childrens' developmental rate (Cazden, 1965; LaCivita, Kean and Yamaota, 1966; Shrinerand and Miner, 1968; Slobin, 1968) while other researchers noted a slower acquisition rate for the minority groups (Peretti and Austin, 1980).

Facility with and amount of vocabulary use is another aspect of language which remains unresolved in the literature. Several researchers indicated reduced vocabulary by the minority groups studied (Johnson, 1970; Plumber, 1970 in Williams; Ramstead and Potter, 1974; Templin, 1957 in Velluntino, 1981; Uhl, Fillmore, and Yano, 1972 in Meline, 1981) while others noted differences, but not deficits (Bernstein, 1967 in Peretti and Austin, 1980; Meline, 1981).

Finally, the use of syntactic skills by minority groups received many interpretations in the literature. Deficiencies by minority groups are emphasized by much of the research (Bereiter and Englemann, 1966; Deutsch, 1965, Raph, 1965 in Hubbell, 1981; Little et al, 1980; Templin, 1957 in Velluntino, 1981). However, much of the research found unique dialectal patterns (Bailey, 1965; Baratz, 1968; Baratz and Povich, 1967; Fasold and Wolfram, 1970; Labov, 1970 in Evard and Sabers, 1979), which indicated that the minority group "deficiencies" may actually have been dialectal differences. In fact,

....distinctions varied as a function of whether the child had to imitate or comprehend the sentences and whether certain dialect features were included in the scoring procedures (Osser, et. al., 1969). Baratz's (Chapter 2) study draws attention to the point that children's performances in sentence reproduction are highly biased in favor of language materials in their own dialects. (Plumber, 1970, p. 281).

These controversies in the literature regarding expected performance make predictions about the language performance of a specific minority, cultural, or socioeconomic group difficult. The diverse results, however, aptly illustrate the need to determine the expected language performance of a specific minority group before defining and identifying an articulation and/or language disorder.

Another alternative may account for the controversy. The group of subjects studied in the various research projects was not always clearly defined. That is, the groups have included economically disadvantaged, culturally disadvantaged, culturally deprived, subjects in low socioeconomic brackets, and/or minority children. Often subjects came from a diverse assortment of ethnic and cultural backgrounds which when taken together may obscure the results for a single, distinct minority group.

# Summary and Purpose of the Study

The <u>FPSLST</u> (1978) assesses four aspects relevant to communication: vocabulary, articulation, receptive language, and expressive language. It demonstrated predictive validity for the group of subjects used in the standardization group, but predictive validity has not been determined for other groups of children. The standardization group included children from four racial or ethnic

backgrounds, three socio-economic classes, and several geographic areas. No Native American students were included in the standardization group. Therefore, as Fluharty (1978) indicated:

... should the test be used in an area where a minority dialect is present, a pilot administration of the test would be justified beforehand to identify those speech and language features peculiar to the dialect (p. 84).

This "pilot administration" is justified because minority groups may show unique language patterns which must be identified in order to discriminate an articulation or language disorder from an articulation or language difference. It is also justified as test taking behavior may render group comparisons inappropriate. Unless the expected performance of a specific minority group is known to the clinician, the application of standardized test norms may be inappropriate.

The purposes of the present study were to answer the following research questions:

- (1) Does the <u>FPSLST</u> (1978) accurately identify kindergarten children in Browning, Montana who later require intervention or follow-up for speech and language problems while demonstrating a low false positive rate?
- (2) Does the performance of kindergarten children in Browning, Montana significantly differ from the published test norms on the FPSLST (1978)?

#### METHODS

# Subjects

A total of 133 students were enrolled in the Browning Schools kindergarten program. Subjects in the present study consisted of 72 of these kindergarten children living in Browning, Montana, and attending Browning Public Schools (District #9). Students were included in the study if they met the following criteria:

- (1) had a chronological age of 5;0-6;11.
- (2) were Native American and living on the Blackfeet Indian Reservation.
- (3) were from a low income background as defined by their eligibility for free or reduced priced meals under the National School Lunch Act. (This eligibility is based on income and family size.)
- (4) used English as a first language, with exposure to the Blackfeet language through relatives and/or cultural activities and/or informal classes at school.
- (5) attended the regular classroom program; had no reported physical abnormalities; and had never been referred to a school psychologist for academic, or psychological testing.
- (6) passed a hearing screening administered according to the guidelines noted in APPENDIX I.

(Children meeting the above criteria are listed in Appendix IIa. Children not meeting the criteria were excluded as subjects for the present study. Information about the children not meeting criteria for the study is located in Appendix IIb.)

## Proceedures

The children were administered the <u>FPSLST</u> in November of 1982 and were tested according to procedures delineated in the <u>FPSLST Guide</u> (Fluharty; 1978) (SEE APPENDIX III) by a licensed clinician. The test

was administered for research purposes after the routine speech and language screening program was completed, and was not the screening device used to determine those children who received further diagnostic testing to determine eligibility for therapy. The routine screening proceedure consisted of the administration of the <u>Kindergarten Language Screening Test (KLST)</u> (Gauthier and Madison, 1978), teacher referral, or parent referral. The clinician did not score the test until caseload selection was completed for 1982-1983.

# Reliability Measurements

Inter-examiner reliability was determined on three children during the time of testing by having another clinician score the subjects simultaneously with the investigator. Reliability was established by determining a point by point percentage of agreement.

# Predictive Validity and Local Norms

In order to determine the predictive validity and local norms for the <u>FPSLST</u>, analyses were conducted for the following measures for each subject:

- (1) the score on the Identification Section of the FPSLST
- (2) the score on the Articulation Section of the FPSLST
- (3) the score on the Comprehension Section of the FPSLST
- (4) the score on the Repetition Section of the FPSLST
- (5) the results (pass/fail) overall for the FPSLST
- (6) the result of the routine screening (the <u>KLST</u>, teacher referral, or parent referral) and the results of the diagnostic testing.

#### CHAPTER III

#### RESULTS

The purpose of this study was two-fold: (1) to determine the predictive validity of the <u>FPSLST</u> in Browning, Mt., and (2) to determine if differences exist between the scores of Browning, Montana children, and those of the children in the standardization group. The results of the analyses will be discussed as they relate to these research goals.

# Determination of Predictive Validity

# Reliability

The inter-tester reliability was assessed by having another clinician administer the <u>FPSLST</u> to three subjects at the same time that the investigator was testing these subjects. A percentage of agreement was determined. The results appear in Table 1.

TABLE 1: Inter-Examiner Reliability by Test Section

		SECTION				
	Total Reliability	ID	A	R	E	
Percentage of	99	100	99	100	98	
Agreement						L

KEY

ID=Identification Section of the FPSLST
A=Articulation Section of the FPSLST
R=Receptive Section of the FPSLST
E=Expressive Section of the FPSLST

#### Correlations

Analyses to determine the predictive validity of the <u>FPSLST</u> for the subjects in the present study included the following: (1) a Phi Coefficient(Downie and Heath, 1970) to determine the relationship of

the results (pass or fail) on the FPSLST to the need for intervention, and (2) a Phi Coefficient to determine the relationship of the results (pass or fail) of each section to the need for intervention. A .05 level of confidence was used to determine significance for the correlations. The results of this analysis revealed a low, but significant correlation between overall performance on the FPSLST and the need for intervention (Phi=.33 (Phi being the Phi Coefficient); p=.007 (p being the Fisher-Exact Test)). The analyses by each test section indicated that the Articulation and Expressive sections of the FPSLST were significantly correlated to the need for intervention (Phi=.31; p=.03 and Phi=.39; p=.004 respectively). The Identification and Comprehension sections were not significantly correlated to the need for intervention (Phi=.08; p=.37 and Phi=.21; p=.08 respectively). The results revealed that although a significant correlation existed between the result (pass or fail) on the FPSLST and the need for intervention, only two sections (Articulation and Expressive) showed a statistically significant relationship to the need for intervention.

Additional frequency distributions were tabulated. A summary of the number of (1) false negatives (students passing the <u>FPSLST</u>, but requiring therapy); (2) false positives (students failing the <u>FPSLST</u>, but not requiring therapy); and (3) students whose need or lack of such need for therapy was predicted by the <u>FPSLST</u> are shown in Table 2.

Table 2: Summary of False Negatives, False Positives, and Accurate Predictions

NEEDS THERAPY	FLUHARTY RESULT		FLUHARTY SECTION
•	pass	fail	Ī
NO	59*	3	ID
YES	9	1*	
NO	59*	3	Ā
YES	7	3*	
NO	52*	10	R
YES	6	4*	Γ
NO	53*	9	E
YES	4	6*	Γ
NO	41*	21	0
YES	2	8*	

KEY FOR FLUHARTY SECTION:

ID=Identification

A=Articulation

R=Receptive

E=Expressive

O=Overall (All sections taken together)

#### KEY FOR FLUHARTY RESULT:

\*=A number with this symbol after it indicates that the number in this box represents the number of students whose need for intervention, or lack of such need was predicted by the FPSLST.

In order to clearly demonstrate the number of false positives, and false negatives, the unasterisked numbers in Table 2 were extrapolated and displayed in Table 3. Table 3 contains a summary of the false positives and false negatives in each section of the <u>FPSLST</u>.

Table 3: A Summary of False Positives and False negatives

FLUHARTY SECTION	FALSE POSITIVES	FALSE NEGATIVES		
ID	3	9		
A	3	7 6 4		
R	10			
E	9			
0	21	2		

KEY FOR FLUHARTY SECTION:

ID=Identification

A=Articulation

R=Receptive

E=Expressive

O=(All sections taken together)

KEY TO FALSE POSITIVES: The numbers in these boxes indicated the number of subjects who failed, but did not require therapy.

KEY TO FALSE NEGATIVES: The numbers in these boxes indicated the number in each section who passed, but required therapy.

An analysis of the errors obtained in the Expressive section (the Repetition task) was also completed. Of the fifteen children in the present study who failed the Expressive Section, nine required no therapy, while six were enrolled for therapy. Of the six who failed and required therapy, none demonstrated the omission of articles as the only error, while all six demonstrated multiple types of errors (two showed errors of article omission and omission of SUBJECT + "SAID" in sentences such as "The boy said, blow hard". Four had a mixture of error types such as article omission and/or omission of SUBJECT + "SAID" and/or verb errors)). On the other hand, of the nine who failed the Expressive Section (the repetition task), but required

no therapeutic intervention, only one student demonstrated the mixture of errors, three the omission of articles, with omissions of SUBJECT + "SAID", and five the omission of articles only (Table 4).

TABLE 4: An Analysis of Errors made on the Expressive Section

	who failed t	ets in Browning, Mt. the Expressive ion and
T	Did not need therapy	Needed therapy
Omit Articles	5	0
Omit articles/S+	3	2
Mixture	1	4
Totals	9	6

#### Key:

"Omit Articles"=indicates that these subjects demonstrated only the omission of articles as an error response on this section

"Omit articles/S+"=indicates that these subjects demonstrated only the omission of articles and the omission of Subject in a sentence such as "The boy said, blow hard

"Mixture"=indicates that these subjects demonstrated omission of articles and/or the omission of Subject as in "The boy said, blow hard" and/or verb errors (tense errors and/or verb omission)

Local Performance and the Comparison to Standardization Group

#### Performance

Means and standard deviations (SD) for the subjects in the present study and for the subjects in the <u>FPSLST</u> standardization group were computed. The groups' performances were then compared through an Analysis of Variance (ANOVA) (Statistical Package for the Social Sciences (SPSS), Klecka et al., 1975). These means, standard deviations, and the ANOVA results are contained in Table 5.

Raw data was provided by Nancy Buono Fluharty for 1,497 children (ages 3-6 years) who represented the children tested as part of

Fluharty's continued research with the <u>FPSLST</u> and were a portion of the children reported in the <u>FPSLST Manual</u> (1978). The data for the 5 and 6 year olds of this 1978 group with raw data were used for the ANOVA. Some discrepancies occured in the total numbers of subjects sent by Fluharty as compared to the numbers reported in the 1978 manual. Also, some of the raw data sent was unusable as the age of the children on the raw data sheets was not clearly indicated. Therefore, 158 five year old subjects and 96 six year old subjects were not available for inclusion in the ANOVA.

TABLE 5: MEANS, STANDARD DEVIATIONS, F RATIOS AND F PROBABILITIES FOR 5 AND 6 YEAR OLD STUDENTS IN BROWNING, MT. AND FOR THE STANDARDIZATION GROUP ON THE FPSLST

BROW		NING	FLUH	FLUHARTY		VA	
		MEAN	SD	MEAN	SD	F	PROB.
FIVE	ID	14.133	•853	14.115	1.344	-011	.916
YEAR	A	28.150	3.145	27.288	3.158	3.981	•047*
OLDS	R	8.73	1.260	8.823	1.216	•287	-592
	E	8.017	2.021	8.508	2.058	3.057	.081
SIX	ID	14.333	•888	14.401	1.006	•052	-820
YEAR	A	29.500	1.000	27.284	4.210	3.295	.071
OLDS	R	8.833	1.115	9.080	1.075	•587	.445
<u> </u>	E	8.000	4.4121	8.636	2.005	1.092	•298

#### KEY:

ID=Identification Section of the FPSLST

A=Articulation Section of the FPSLST

R=Receptive Section of the FPSLST

E=Expressive Section of the FPSLST

\*=Significant

The ANOVA revealed that only the scores on the Articulation Section were significantly different (F1,538=3.981) between the five year olds in the Browning group and those of the standardization group. The scores on the Identification, Receptive, and Expressive Sections of the test revealed no significant (ns) differences between the five year olds of the Browning group and those of the

standardization group (Identification-F1,538=.011,ns; Receptive-F1,538=.287,ns; and Expressive-F1,538=3.057,ns). Between six year olds in the Browning group, and those of the standardization group, no sections were significantly different. F ratios were as follows: Identification-F1,172=.052; Articulation-F1,172=3.295; Receptive-F1,172=.587; Expressive-F1,172=1.092). In general the children in Browning performed the same as the children in the standardization group except for 5 year olds on the articulation section.

#### CHAPTER IV

#### DISCUSSION

One purpose of the present study was to determine if the FPSLST (1978) accurately predicted those students from a minority population who were in need of intervention or follow-up for speech and/or language problems. The results of the analyses revealed that a significant, but small relationship (Williams, 1968) existed between the result (pass or fail) on the FPSLST and the need for intervention for subjects in Browning, Mt. (the coefficient being ..33). Williams (1968) used a guide from Guilford and noted that a coefficient between .20 and .40 indicated a low correlation and a definite but small relationship. However, only two sections of the FPSLST (Articulation and Expressive sections) showed a significant but small correlation to the need for intervention. A second purpose of the present study was to determine if the performance of kindergarten children in Browning, Montana differed significantly from the published test norms for the FPSLST (1978). The results of the present study indicated that only one section (Articulation) for one age group (five year olds) did the differences in performances reach statistical significance. two groups, kindergarten children in Browning, Montana, and children in the standardization group, performed essentially the same The following discussion will on the FPSLST (1978). address possibilities for the finding that although the children in the test standardization and the children in Browning, Mt. performed essentially the same, the FPSLST (1978) did not predict those students in Browning, Mt. in need of intervention to the same degree of

relationship as it did for the standardization group.

# Performance Comparisons

Several racial and ethnic backgrounds were represented in the standardization group (White, Black, Mexican-American, and Oriental), but no Native Americans were included. Comparisons between specific minority groups are not always justified since group findings collapse differences that may exist for specific minority groups. Also, the results of research suggest that minority performance may differ from the performance of a White peer group (Golub, 75; Labov, 75; Fishman, Deutsch, Kogan, North, and Whiteman, 74; Severson and Guest, 70). Therefore, given the lack of Native Americans in the standardization group, the collapsing of data that may have obscured results for any given minority group, and the results of previous research, a difference in FPSLST performance between the standardization group and the group in the present study was predicted. The results of the however, indicated that the performance of the present study standardization group, and the subjects in Browning, Mt. was essentially the same. Also, unlike the high correlation (.897) between the FPSLST (1978) score and the need for therapy reported for the standardization group, the result for the group in the present study indicated a low correlation (.33) between the test result and the need for therapy. Although statistical significance was achieved, the magnitude of the relationship must be examined in terms of the clinical application of this relationship. The coefficient of determination (Williams, 1968) for the two measures (the r2 for the FPSLST performance and the need for therapy) in the standardization The standardization group shared more than seven times the variance than did the same measures for the Browning group. What possible reasons exist for this discrepancy in the degree of the relationship between test performance and need for intervention between the two groups (the standardization group and the group in the present study)? Also, does the discrepancy negate the use of the <u>FPSLST</u> in Browning, Mt.? These questions will be addressed in the following discussion.

# Predictive Validity

The diagnostic testing and the entrance criteria used to determine students eligible for therapy in each study must be examined as a possible reason for the different degrees of predictive validity. Fluharty originally standardized the <u>FPSLST</u> in 1974. At that time, the subjects were administered a battery of tests including the <u>Peabody Picture Vocabulary Test</u> (Dunn, 1965), <u>The Goldman-Fristoe</u> <u>Test of Articulation</u> (Goldman and Fristoe, 1969) and <u>The Northwest</u> Syntax Screening Test(Lee, 1969).

The results of these tests were used for two purposes: (1) to establish the cut-off scores on the <u>FPSLST</u>, and (2) to determine the validity of the test. Fluharty (1974) stated,

The Pearson product-moment correlation was computed to determine the correlation between the results of the screening test and the results of a complete diagnostic evaluation. The correlation coefficient of validity for the instrument was 0.87, which is within the limits of acceptability.

The correlation under discussion, however, appears to be a relationship of the test battery to that same test battery. The screening test cut-off scores are derived from the test battery listed

and the performances on these same tests were used to establish the need for intervention.

In 1978, Fluharty expanded her normative group by including children from additional geographic areas. The same test battery was used as in 1974 to establish cut-off scores. However, Fluharty did not, in the 1978 manual, specify the tests used for the validity correlation. She merely referred to a "speech evaluation" determine the need for therapy (Manual, p. 15). Again, one must question whether the 1978 Pearson product-moment correlation of was merely a reflection of the relationship of a test battery to itself, rather than an external indication of predictive validity. In neither standardization did Fluharty appear to use criteria for assessing the need for remediation. The Fluharty results, therefore, are somewhat difficult to interpret since the performance on the battery of tests may have been used for both the derivation of cut-off scores and the determination of predictive validity for the need for intervention.

Consequently, the actual predictive validity of the test must be questioned. Would the degree of correlation be as high as reported if a separate test battery other than the battery used to derive the <u>FPSLST</u> cut-off scores was used to show the predictive validity of the test? The measures used to determine predictive validity in the present study consisted of the results of the <u>KLST</u>, teacher referral, and parent referral, and then the results of a "speech evaluation". In Browning, for example, the "speech evaluation" consisted of not only the <u>Peabody Picture Vocabulary Test</u>(Dunn and Dunn, 1981) and <u>The</u>

Goldman-Fristoe Test of Articulation (Goldman and Fristoe, 1969) (two of the tests used in Fluharty's test battery), but also of:

- (1) The Test of Language Development (Newcomer and Hammill, 1977)
- (2) The Boehm Test of Basic Concepts (Boehm, 1971)
- (3) The Fisher-Logemann Test of Articulation (Fisher and Logemann, 1971)
- (4) The Test of Auditory Comprehension of Language (Carrow, 1973)
- (5) A Language Sample
- (6) Classroom and/or other observations, and in every case
- (7) conferences with classroom teachers, parents, principal, and a director of special services (within the confines of a "Child Study Team" meeting), and in some cases, additional conferences.

The choice of tests to be administered varied and was based on the child's performance on the KLST used to determine those students need οf diagnostic testing. {The screening did not include performances on the FPSLST (1978). The FPSLST (1978) was administered for research purposes only }. Had Fluharty used the same test battery used in Browning, Mt., or independent criteria for which determining cut-off scores and determining validity, would the degree of correlation be significantly reduced and more closely parallel that of that found in the present study? This question can only be answered through further research.

A second variable which may have accounted for the magnitude of the discrepancy between the predictive validity for both groups was the interpretation of pass or fail on an item. One example illustrates this point. In the present study, of those subjects who failed the Expressive section, but did not require therapy (false positives), most subjects demonstrated the omission of articles as the

only error in the Expressive Section. Only one subject in this false positive group demonstrated a mixture of errors (such as article omission and/or omission of subject in a sentence such as, "The boy said, blow hard." and/or verb errors (either tense or omission)). For the subjects in the present study, multiple errors, rather than omissions of articles as the only error on the Expressive section, predicted those students in need of therapy. Changing this criteria, and passing subjects on the Expressive section who only demonstrated the omission of articles may have increased the degree of relationship between the result of the FPSLST (pass/fail) and the need for intervention. This change, however, would also influence the group performance on the test (means and standard deviations). Further research is needed to determine if a change interpretation of pass/fail in the Expressive section would make the FPSLST a more accurate predictor of the need for therapy for students in Browning, Mt.

The clinical relevance of the degree of correlation will be addressed. For both groups of subjects, the standardization group, and the present study, the relationship of performance on the <u>FPSLST</u> and the need for therapy was statistically significant in a positive direction. However, "even though a correlation is statistically significant, its psychological significance remains to be interpreted by the researcher (Williams, 1968)." In this case, "psychological significance" must be based on whether the <u>FPSLST</u> predicted children in need of therapy accurately and efficiently (without missing students in need of remediation for speech/language problems, while

failing an excessive number of students with adequate speech/languages skills). The results of the present study indicated that the majority of error predictions were false positives (21 subjects or 30%) rather than false negatives (only two subjects or False negatives are of greater concern to a practicing clinician 3%). in terms of the early identification of students who need help with their speech/language skills, so the 3% false negative is approaching the ideal of 0% false negative rate. This low false negative rate in the present study is better than that found by Blaxley et al. (1983). They found a high false negative rate when comparing the FPSLST results to Developmental Sentence Scoring (Lee, 1974), but, as the authors stated the comparison was between the FPSLST which assessed several language skill areas, and a single diagnostic measure designed to assess only grammatical forms (Blaxley et al., 1983).

In terms of failing students whose speech/language skills were adequate, the <u>FPSLST</u> in the present study overidentified by 30%. Since the <u>FPSLST</u> is a screening, rather than a diagnostic tool, some overidentification is expected—i.e. a practicing clinician would expect some students to fail (for a variety of reasons) who are found later through the diagnostic testing to have adequate speech/language skills. However, when the number of false positives becomes too high one must consider the unnecessary time and cost involved in testing students who did not require assistance. In the present study, the 30% overidentification rate suggested that the criteria for pass/fail should be examined. The number of false positives also suggested that further research is needed to determine if additional screening for

students failing the <u>FPSLST</u> (i.e. a longer, or more in-depth screening) would reduce the false positives after the <u>FPSLST</u>, or if additional criteria such as teacher judgement in addition to the <u>FPSLST</u> result would more adequately indicate the need for therapy.

# Limitations of the Present Study

Several limitations of the present study must be recognized. One limitation is the small sample size. The necessity of eliminating several students from the study may have reduced the generalization of these results. Secondly, the test battery, which served in the present study as the external criteria to measure predictive validity, varied from subject to subject. Future research may need to control this variable to better determine validity. Finally, the scope of this study was also limited in that only selected subjects were given a diagnostic test battery, thus leaving the possibility that a speech/language disordered student was unidentified. Future research should attempt to administer a predetermined battery of tests to all the kindergarten students to see if any student passed the screening routinely used in Browning, passed the FPSLST, but was in need of therapy.

# Implications for Further Research

Several important research questions remain unanswered:

- (1) If the test battery used by Fluharty was used in Browning, Mt. to determine eligibility for therapy, would the <u>FPSLST</u> (1978) predict those students in need of remediation as well as it did for the standardization group? and
- (2) If independent criteria (i.e. a battery of tests like that used in Browning, Mt.) were used to determine those students in the standardization group in need of therapy,

would the predictive validity reported by Fluharty (i.e. the correlation of the screening test score to the need for therapy) be as acceptable?

- (3) Would the predictive validity have increased for the <u>FPSLST</u> in Browning, Mt. if a predetermined battery of tests were used to establish the need for intervention, rather than tests that varied for each student?
- (4) Although a low false negative rate was found in the present study, would this change if all students were given diagnostic testing, rather than only those students who failed another screening (i.e. not the <u>FPSLST</u> which was only administered for research purposes)?
- (5) Would clinical usefulness of the <u>FPSLST</u> be increased by a change of criteria for the passing or failing of specific items, or by the addition of criteria (i.e. such as a second screening for failures, or as teacher judgement additionally)?

To summarize, additional research is needed to determine how to best identify students in need of remediation for speech/language disorders. Research is needed to determine local communication patterns which may influence criteria for passing or failing.

### Summary and Conclusions

Even though the results of the present study revealed that performance scores on the <u>FPSLST</u> were not statistically different between the Browning subjects and the standardization group, a difference in degree of correlation between the two groups was found in accurately predicting the need for therapy. While both correlations showed statistical significance, the reasons for the magnitude of the discrepancy between the correlations, including differing criteria to determine eligibility for therapy, and criteria for passing or failing an item on the <u>FPSLST</u>, were discussed. The

clinical vs. statistical significance of the results of the present study was discussed. Even given the limited scope of the study, the results of the present study suggested that the decision to use the <a href="#FPSLST">FPSLST</a> as a tool for predicting students in need of therapeutic remediation of speech/language problems must be made with caution.

### REFERENCES

- Blaxley, Lynn, Clinker, Margo, & Warr-Leeper, Genese. Two Language Screening Tests Compared with 'Developmental Sentence Scoring'. Language, Speech, and Hearing Services in the Schools, January 1983, 14, #1, 38-46.
- Boehm, Ann E. The Boehm Test of Basic Concepts. New York, New York, The Psychological Corporation, 1971.
- Bruning, James L., & Kintz, B.L. <u>Computational Handbook of Statistics</u>. Glenview, Illinois, Scott, Foresman and Company, 1977.
- Burrows, Evelyn, & Neyland, Della. Reading Skills, Auditory Comprehension of Language, and Academic Achievement. Journal of Speech and Hearing Disorders, 1978, 43, 467-472.
- Carrow, E. Test of Auditory Comprehension of Language. Austin, Texas, Learning Concepts, 1973.
- Corbin, Richard, & Crosby, Muriel. Language Programs for the Disadvantaged-Report of the National Council of Teachers of English Task Force on Teaching English to the Disadvantaged. Champain, Illinois, National Council of Teachers of English, 1965.
- Dale, Philip S. <u>Language Development-Structure and Function</u>. New York, New York, Holt, Rinehart and Winston, 1976.
- Darley, Frederic L. Evaluation of Appraisal Techniques in Speech and Language Pathology. Menlo Park, California, Wesley Publishing Company, 1979.
- Darley, Frederic L., & Moll, Kenneth L.. Reliability of Language Measures and Size of Language Sample. <u>Journal of Speech and Hearing Research</u>, 1960, 3,166-173.
- DeAvila, Edward A., & Havassy, Barbara. The Testing of Minority Children-a Neo-Piagetian Approach. Today's Education. 1974, November-December, 72-75.

- Downie, N.M., & Heath, R.W. <u>Basic Statistical Methods</u>. New York, New York, Harper & Row, Publishers, 1970.
- Dunn, Lloyd M. <u>Peabody Picture Vocabulary Test</u>. Circle Pines, Minnesota, American Guidance Service, Inc., 1965.
- Evard, Beth L., & Sabers, Darrell. Speech and Language Testing with Distinct Ethnic-Racial Groups: A Survey of Procedures for Improving Validity. Journal of Speech and Hearing Disorders, August 1979, 44, #3, 271-281.
- Fisher, Hilda B., & Sogemann, Jerilyn A. <u>Fisher-Logemann Test of Articulation Competence</u>. Boston, Massachusetts, Houghton-Mifflin Co., 1971.
- Fluharty, Nancy B. The Design and Standardization of a Speech and Language Screening Test for Use with Preschool Children. <u>Journal</u> of Speech and Hearing Disorders, February 1974, 39, 75-88.
- Fluharty, Nancy B. Fluharty Preschool Speech and Language Screening Test. Boston, Massachusetts, Teaching Resources, 1978.
- Flynn, Pauline T., & Byrne, Margaret C. Relationship between Reading and Selected Auditory Abilities of Third-grade Children. <u>Journal</u> of Speech and Hearing Research, 1970, 13, 725-730.
- Friesen, John W., & Moseson, Linda. The Plains Indians and Educational Theory. <u>Journal of American Indian Education</u>, October 1971, 19-26.
- Gauthier, Sharon V. & Madison, Charles L. <u>Kindergarten Language</u> Screening Test. Tigard, Oregon, C.C. Publications, Inc., 1978.
- Goldman, Ronald, and Fristoe, Macalyne. The Golman-Fristoe Test of Articulation. Circle Pines, Minnesota, American Guidance Service, 1969.
- Golub, Lester S. English Syntax of Black, White, Indian, and Spanish-American Children. Elementary School Journal, 1975, 75, #5, 323-334.

- Harris, Gail. ASHA Interview/Gail Harris, Indian Advocate. ASHA, June 1982, 24, #6, 388-392.
- Hubbell, Robert D. <u>Children's Language Disorders-An Integrated</u>

  <u>Approach</u>. <u>Englewood Cliffs</u>, New Jersey, Prentice Hall, Inc., 1981.
- Johnson, K.R.. <u>Teaching the Culturally Disadvantaged</u>. Palo Alto, California, SRA, Inc., 1970.
- Johnson, Wendell, Darley, Frederic L., and Spriestersbach, D.C.

  <u>Diagnostic Methods in Speech Pathology</u>. New York, New York,

  Harper & Row, Publishers, 1963.
- Kresheck, Janet SD., & Nicolosi, Lucille. A Comparison of Black and White Children's Scores on the Peabody Picture Vocabulary Test.

  Journal of Speech and Hearing Services in the Schools, 1973, 1, 37-40.
- Little, J. Wesley, Moon, Charles E., & Contraras, Maximiliano. A Comparative Study of the Language Comprehension of Rural American Indian and Rural Caucasian Kindergarten Age Children. Early Child Development and Care, 1980, 6, 201-206.
- Malone, Russell L.. Comment. ASHA, June 1982, 24, #6, 370.
- Mecham, Merline J. Performance of Certain Minority Children on the Utah Test of Language Development. Language Speech and Hearing Services in Schools, 1978, 9, #2, 98-102.
- Meline, Timothy J. Socioeconomic Status and Variability on the PPVT. Language Speech and Hearing Services in Schools, 12, #2, 90-94.
- Miller, Anthony G., & Thomas, Ron. Cooperation and Competition among Blackfeet Indian and Urban Canadian Children. Child Development, 1972, 43, 1104-1110.
- Minifie, Fred D., Darely, Frederic L., & Sherman, Dorothy.
  Reliability of Seven Language Measures. <u>Journal of Speech and</u>
  Hearing Research, 1963, 6, 139-149.

- Musselwhite, Caroline Ramsey. Pluralistic Assessment in Speech-Language Pathology: Use of Dual Norms in the Placement Process. Language Speech and Hearing Services in Schools, January 1983, 14, #1, 29-37.
- Nation, James E., & Aram, Dorothy M. <u>Diagnosis of Speech and Language</u>
  <u>Disorders.</u> Saint Louis, MO., The C.V. Mosby Company, 1977.
- Newcomer, Phyllis . & Hammill, Donald D. <u>Test of Language</u>

  <u>Development</u>. Los Angeles, California, Western Psychological

  <u>Services</u>, 1977.
- Peace, Betty. The Social and Cognitive Play of Blackfeet Head Start Indian Children. Unpublished Master's Thesis, Colorado State University, 1982.
- Peretti, Peter O., & Austin, Sandra. Cultural deprivation Reflected in Linguistic Acquisition and Development. Social Behavior and Personality, 1980, 8, #2, 225-227.
- Ramstad, Vuran V., & Potter, Robert E., Differences in Vocabulary and Syntax Usage Between Nez Perce Indian and White Kindergarten Children. Journal of Learning Disabilities, 1974, 7, #8, 491-497.
- Rees, Norma S.. The Speech Pathologist and the Reading Process. ASHA, May 1974, 16, 255-258.
- Sachs, David A.. The WISC and the Mescalero Apache. <u>Journal of</u> Social Psychology, , 92, #2, 303-304.
- Stark, Joel. Reading Failure: A Language-Based Problem. ASHA, December 1975, 17, 832-834.
- Toubbeh, Jamil L.. ASHA Editorial/Native Americans: A Multi-Dimensional Challenge. ASHA, June 198, 24, #6, 395-397.
- Velluntino, Frank R.. <u>Dyslexia: Theory and Research</u>. Cambridge, Massachusetts, MIT Press, 1981.
- Ventry, Ira M., & Schiavetti, Nicholas. Evaluating Research in Speech

- Pathology and Audiology. Reading, Massachusetts, Addison-Wesley Publishing Co., 1980.
- Weger, Randy, Hattuck, John, & Erickson, Robert. Language Comprehension and Articulation: A Study of Children Entering Kindergarten in Grand Rapids Unpublished Booklet, 1976. (Available from R. Weger, Good Samaritan Hospital, Viniennes, Indiana, 47591.
- Welye, Little, J., Moon, Charles E., & Contraras, Maximiliano. A Comparative Study of the Language Comprehension of Rural American Indian and Rural Caucasian Kindergarten Age Children. <u>Early</u> Childhood Development and Care, 1980, 6, 3-4, 201-206.
- Williams, Frederick. Language and Poverty (Perspectives on a Theme). Chicago, Illinois, Markham Publishing Co., 1970.
- Williams, Frederick. Reasoning with Statistics Simplified Examples in Communications Research. New York, New York, Holt, Rinehart, and Winston, Inc., 1968.

#### APPENDIX I

# Hearing Screening Criteria

Criteria for passing the hearing screening conducted in the fall of the school year were based on those in the <u>Handbook of Hearing</u>

<u>Conservation</u> (Office of Public Instruction; Helena, 1980). The procedures, however, were modified and were as follows:

- 1. Frequencies screened included 1,000Hz, 2,000hz, and 4,000Hz.
- 2. All the above frequencies were screened at 15db ANSI (Handbook of Hearing Conservation, 1980).
- 3. A Kindergarten student passed the acuity section of the hearing screening if he or she responded to the tones presented.
- 4. If the child failed to respond at 15db ANSI (Handbook of Hearing Conservation, 1980) thresholds were obtained for those frequencies. Once thresholds were obtained, the child failed the hearing criteria:
  - a. Thresholds were greater than 20db ANSI (Handbook of Hearing Conservation, 1980) regardless of the results of the impedance screening, or
  - b. Thresholds were 20db ANSI (Handbook of Hearing Conservation), and the acoustic immitance screening indicated responses outside of normal limits.

The child was judged to pass the threshold testing if thresholds were 20db ANSI or better.

For purposes of this study, children met the hearing criteria if the acuity section of the fall hearing screening was passed, regardless of the acoustic immitance results. In certain cases a hearing recheck was administered within two months. These children passed the impedance section of the original screening, but their performances were considered borderline on the hearing acuity

section. If the student passed the acuity section of the recheck, the acuity of the child was considered to be within normal limits for purposes of this study.

#### APPENDIX II

Of the 133 students seen, 72 students met criteria for inclusion in the present study. Their test results were used for the statistical analysis. A "1" by each variable indicated that a specific criteria was met. 38 children did not meet the criteria and were therefore excluded from the present study. Children with the notation "out" in the section marked IN/EX were also treated as excluded children. 23 children were not included in the study for reasons as follows:

- (1) 8 children moved from the school system before all data could be compiled to determine their eligibility for inclusion (These children with incomplete data have "out" marked in the IN/EX section.),
- (2) 5 children were frequently absent so that completing data on them was impossible (Again, these are marked as "out" in the IN/EX section and they were excluded from the present study. These 5 frequently absent students have the notation "missed-poor attendance" in the section entitled, "OTHER".),
- (3) 4 students were located in an outlying school in the district, and so if absent on the original testing date, were not tested again because of travel distance.
- (4) 6 students were missed by this examiner and were marked "out" in the IN/EX section with the notation, "missed-ok attendance" in the section entitled, "OTHER".

A summary of children excluded and included from the study is as follows:

- 133 potential subjects when testing began
- -8 moved during testing process
- 125 population when eligibility determined

- 6 missed by the examiner
- +5 poor attendance so testing incomplete
- +4 at an outlying school
- 15 total of potential subjects missed
- 125 population when eligibility determined

  -15 total of students not tested

  110 total students available to select for eligibility
- 110 total students available to select for eligibility
- -72 met criteria
- -38 did not meet criteria (See appendix II listings)

Definitions for abbreviations used are as follows:

SUB#: an arbitrary number assigned to each child seen for possible inclusion in the present study.

AGE: the age of the child at the time that the test was administered.

HM: A "1" in this space indicated that the child met criterion for

Indian degree. A "O" indicated that although the child was living on the Blackfeet Indian Reservation, he or she did not meet criterion for degree of Indian.

SES/IN: the Child's eligibility for free or reduced lunch. "1" indicated that the child qualified for a reduction, and was therefore included in the study. "0" indicated that the child did not meet the criteria for economic standing.

LANG: Children received a "1" in this section if they spoke English as a native language, and were exposed to Blackfeet through exposure.

"0" indicated that the subject did NOT speak English as a native language, but rather knew English as a second language, and were therefore excluded from the study.

HEARING/DATE: Unlike the other sections, "1" and "0" do not apply. Rather, "p" was used to denote a passing of the hearing screening administered, while "f" indicated a failure. The two numbers after the "/" refer to the last two digits of the year that the screening took place. In this section, "p" indicated the same results as "1", and "f" indicated the same results as "0".

VISION/DATE: Same as above except that this section indicated the results of the vision screening.

OTHER: Comments in this section relate to the results of the above

sections, and are self-explanatory.

IN/EX: "IN" indicated that because the child met entry criteria, he or she became a subject in the present study. "EX" indicated that the child failed to meet entry criteria and was excluded from the present study.

## **RESULTS:**

FLUHARTY: "F" in the space directly after this section title indicated that the subject has failed the <u>FPSLST</u>. The letters after the "F" refer to the particular section of the screening test that the subject failed: "I" indicated that the identification section was failed. "A" indicated that the articulation section was failed. "R" indicated that the receptive section was failed. "E" indicated that the expressive section was failed. A space marked with a "-" indicated that a section was passed. Some examples of this system follow:

### EXAMPLE 1:

### FLUHARTY: FIARE

The appearance of this sequence indicated that the child failed the <u>FPSLST</u>. It also indicated that the identification, articulation, receptive, and expressive sections were all failed.

# EXAMPLE 2.

## FLUHARTY: F--R-

This indicated that the child failed the FPSLST. The child, however, passed the identification, articulation, and expressive sections. The receptive section was failed by this child.

The score value obtained by the child on each section of the FPSLST was marked below the title, "FLUHARTY", and beside the abbreviation for each section: "ID" refered to the identification section. "A" refered to the articulation section. "R" refered to the receptive section. And "E" refered to the expressive section of the screening test. "T" on the same line did not indicate a score value, but rather the result of the screening: "T:PASS" indicated that the child passed the FPSLST. "T:FAIL" indicated that the child failed the screening test.

On the next line of the form marked, "FALL" were the results of the child's fall screening. "PASS" indicated that the student passed the screening given in the fall. "FAIL" indicated that the child failed the fall screening.

"ENROLLED/THERAPY:" indicated if the child received therapy ("YES") or if he or she did not ("NO").

The section entitled "NOTES" included comments about data. Most of the comments are self-explanatory, but several of these comments ("NOTES:J", "TOQUE/HAT", and "CAP/HAT") are explained in APPENDIX IV.

Data for each child is shown on the following pages. APPENDIX IIa is data for the children included in the present study. APPENDIX IIb is the data for the children excluded. NOTES:J", "TOQUE/HAT", and "CAP/HAT" are explained in APPENDIX III.

```
SUB#: 002 AGE: 6/02
HM: 1 SES/IN.: 1
LANG: 1 STATUS: 1
HEARING/DATE: P/82 VISION/DATE: P/82
OTHER:
IN/EX: IN
-----RESULTS----:
FLUHARTY:
ID: 15 ARTIC: 30 R: 10 E: 10 T: PASS
FALL: PASS
.
ENROLLED/THERAPY: NO
NOTES:
 SUB#: 004 AGE: 5/09
 HM: 1 SES/IN.: 1
 LANG: 1 STATUS: 1
 HEARING/DATE: P/82 VISION/DATE: P/82
 OTHER:
 IN/EX: IN
  -----RESULTS-----
 FLUHARTY: F--R-
 ID: 14 ARTIC: 30 R: 07 E: 10 T: FAIL
  FALL: PASS
  ENROLLED/THERAPY: NO
  NOTES:
  : TOQUE/HAT
```

HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1T HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN -----RESULTS----: FLUHARTY: ID: 14 ARTIC: 30 R: 09 E: 10 T: PASS FALL: PASS ENROLLED/THERAPY: NO NOTES: J : TOQUE/HAT SUB#: 003 AGE: 5/06 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN -----: FLUHARTY: F-A--ID: 14 ARTIC: 23 R: 09 E: 08 T: FAIL FALL: PASS ENROLLED/THERAPY: NO NOTES: J : TOQUE/HAT

SUB#: 001 AGE: 5/04

SUB#: 006 AGE: 5/11 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1T HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN ====================================	SUB#: 007 AGE: 5/10 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1T HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
: FLUHARTY: FRE ID: 15 ARTIC: 30 R: 07 E: 02 T: FAIL	
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES:	NOTES: : TOQUE/HAT
SUB#: 008 AGE: 5/05 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1T HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 012 AGE: 6/01 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
======================================	
FLUHARTY: F-ARE ID: 14 ARTIC: 16 R: 05 E: 03 T: FAIL	FLUHARTY: ID: 14 ARTIC: 30 R: 10 E: 09 T: PASS
FALL: FAIL	FALL: PASS
ENROLLED/THERAPY: YES	ENROLLED/THERAPY: NO
NOTES: : TOQUE/HAT	NOTES: : TOQUE/HAT

SUB#: 017 AGE: 5/11 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
: FLUHARTY: F-A ID: 14 ARTIC: 20 R: 10 E: 08 T: FAIL
FALL: FAIL
ENROLLED/THERAPY: YES
NOTES: : TOQUE/HAT
SUB#: 020 AGE: 5/08 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
FALL: PASS
ENROLLED/THERAPY: NO
NOTES:

SUB#: 021 AGE: 5/04 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 022 AGE: 6/00 HM: 1 SES/IN: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
:: FLUHARTY: ID: 14 ARTIC: 27 R: 10 E: 09 T: PASS	FLUHARTY: FE ID: 14 ARTIC: 30 R: 09 E: 07 T: FAIL
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: : TOQUE/HAT	NOTES: J : TOQUE/HAT
SUB#: 023 AGE: 5/10 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 024 AGE: 5/03 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1T HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
FLUHARTY: ID: 14 ARTIC: 30 R: 10 E: 10 T: PASS	FLUHARTY: ID: 15 ARTIC: 30 R: 10 E: 10 T: PASS
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: : TOQUE/HAT	NOTES:

SUB#: 025 AGE: 5/07 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 028 AGE: 5/08 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
FLUHARTY: ID: 13 ARTIC: 27 R: 08 E: 08 T: PASS	: FLUHARTY: ID: 15 ARTIC: 25 R: 09 E: 09 T: PASS
FALL: FAIL	FALL: PASS
ENROLLED/THERAPY: YES	ENROLLED/THERAPY: NO
NOTES: J : CAP/HAT	NOTES:
SUB#: 030 AGE: 5/06 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 031 AGE: 5/08 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
FLUHARTY: ID: 13 ARTIC: 28 R: 08 E: 08 T: PASS	FLUHARTY: ID: 15 ARTIC: 29 R: 10 E: 09 T: PASS
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES:	NOTES: J

SUB#: 032 AGE: 6/01 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 033 AGE: 5/04 HM: 1 SES/IN:: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
FLUHARTY: FRE ID: 14 ARTIC: 30 R: 07 E: 06 T: FAIL	FLUHARTY: ID: 15 ARTIC: 30 R: 10 E: 10 T: PASS
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: J : TOQUE/HAT	NOTES: : CAP/HAT
SUB#: 034 AGE: 6/00 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 035 AGE: 5/07 HM: 1 SES/IN:: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
	FLUHARTY: ID: 15 ARTIC: 30 R: 09 E: 10 T: PASS
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: : TOQUE/HAT	NOTES: : CAP/HAT

77
ge
4

SUB#: 036 AGE: 5/10 HM: 1 SES/IN: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 037 AGE: 5/02 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
: FLUHARTY: ID: 14 ARTIC: 30 R: 09 E: 10 T: PASS	: FLUHARTY: FR- ID: 13 ARTIC: 30 R: 07 E: 07 T: FAIL
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: : TOQUE/HAT	NOTES: : CAP/HAT
SUB#: 040 AGE: 5/06 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 041 AGE: 6/03 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1T HEARING/DATE: P/83 VISION/DATE: P/82 OTHER: IN/EX: IN
:: FLUHARTY: ID: 14 ARTIC: 29 R: 09 E: 08 T: PASS	FLUHARTY: ID: 15 ARTIC: 27 R: 09 E: 10 T: PASS
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: J : TOQUE/HAT	NOTES: J : HAD THERAPY: WAS DISMISSED

SUB#: 042 AGE: 5/05 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 049 AGE: 5/08 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
	RESULTS:
FLUHARTY: ID: 15 ARTIC: 30 R: 09 E: 09 T: PASS	FLUHARTY: ID: 15 ARTIC: 30 R: 08 E: 10 T: PASS
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: J	NOTES: J
SUB#: 050 AGE: 5/05 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 051 AGE: 6/01 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
FLUHARTY: FE ID: 15 ARTIC: 29 R: 09 E: 06 T: FAIL	FLUHARTY: ID: 15 ARTIC: 30 R: 09 E: 09 T: PASS
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES:	NOTES:

Ş

SUB#: 061 AGE: 5/11 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 064 AGE: 5/04 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
FLUHARTY: ID: 13 ARTIC: 29 R: 08 E: 10 T: PASS	FLUHARTY: ID: 15 ARTIC: 30 R: 08 E: 10 T: PASS
	FALL: PASS
FALL: PASS	ENROLLED/THERAPY: NO
ENROLLED/THERAPY: NO	NOTES: J
NOTES:	•
SUB#: 065 AGE: 5/09 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 066 AGE: 5/10 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
======================================	
FLUHARTY: FE ID: 14 ARTIC: 30 R: 10 E: 06 T: FAIL	FLUHARTY: ID: 14 ARTIC: 30 R: 10 E: 10 T: PASS
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: J : TOQUE/HAT	NOTES: : TOQUE/HAT

SUB#: 067 AGE: 5/04 HM: 1 SES/IN:: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 068 AGE: 5/03 HM: 1 SES/IN: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
: FLUHARTY: ID: 14 ARTIC: 29 R: 10 E: 10 T: PASS	: FLUHARTY: ID: 15 ARTIC: 30 R: 08 E: 10 T: PASS
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: : TOQUE/HAT :  SUB#: 069 AGE: 5/08 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	NOTES:  SUB#: 071 AGE: 5/11 HM: 1 SES/IN: 1 LANG: 1 STATUS: 1T HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
: FLUHARTY: ID: 15 ARTIC: 29 R: 10 E: 09 T: PASS	FLUHARTY: FI-RE ID: 12 ARTIC: 28 R: 06 E: 05 T: FAIL
FALL: PASS	FALL: FAIL
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: YES
NOTES: J	NOTES:

SUB#: 073 AGE: 6/01 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1T HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 074 AGE: 5/05 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
: FLUHARTY: FRE ID: 15 ARTIC: 29 R: 07 E: 02 T: FAIL	: FLUHARTY: ID: 15 ARTIC: 30 R: 10 E: 10 T: PASS
FALL: FAIL	FALL: PASS
ENROLLED/THERAPY: YES	ENROLLED/THERAPY: NO
NOTES: J  SUB#: 075 AGE: 5/04  HM: 1 SES/IN: 1  LANG: 1 STATUS: 1  HEARING/DATE: P/82 VISION/DATE: P/82  OTHER: IN/EX: IN	NOTES:  SUB#: 076 AGE: 5/04  HM: 1 SES/IN.: 1  LANG: 1 STATUS: 1T  HEARING/DATE: P/82 VISION/DATE: P/82  OTHER: IN/EX: IN
FALL: PASS	FALL: FAIL-T
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES:	NOTES: : TOQUE/HAT

SUB#: 077 AGE: 6/02 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 078 AGE: 5/08 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1T HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
	FLUHARTY: ID: 14 ARTIC: 30 R: 09 E: 07 T: PASS
FALL: PASS	FALL: FAIL
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: : CAP/HAT	NOTES: J : TOQUE/HAT
SUB#: 079 AGE: 5/10 HM: 1 SES/IN: 1 LANG: 1 STATUS: 1T HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 081 AGE: 6/01 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
FLUHARTY: FE ID: 14 ARTIC: 26 R: 09 E: 06 T: FAIL	FLUHARTY: ID: 14 ARTIC: 30 R: 10 E: 10 T: PASS
FALL: FAIL	FALL: PASS
ENROLLED/THERAPY: YES	ENROLLED/THERAPY: NO
NOTES: : TOQUE/HAT	NOTES: : TOQUE/HAT

SUB#: 082 AGE: 5/03 HM: 1 SES/IN: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 083 AGE: 5/08 HM: 1 SES/IN: 1 LANG: 1 STATUS: 1T HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
FLUHARTY: ID: 14 ARTIC: 29 R: 10 E: 08 T: PASS	
FALL: PASS	FALL: FAIL
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: YES
NOTES: : TOQUE/HAT	NOTES: J : TOQUE/HAT
SUB#: 085 AGE: 5/08 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 086 AGE: 6/11 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
: FLUHARTY: ID: 15 ARTIC: 28 R: 09 E: 10 T: PASS	
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: J	NOTES: : TOQUE/HAT

SUB#: 090 AGE: 5/04 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN ====================================	SUB#: 091 AGE: 5/09 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN ====================================
ID: 14 ARTIC: 28 R: 07 E: 09 T: FAIL	ID: 15 ARTIC: 30 R: 10 E: 07 T: PASS
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: J : CAP/HAT	NOTES: : CAP/HAT
SUB#: 093 AGE: 5/08 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1T HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 094 AGE: 5/09 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1T HEARING/DATE: P/82 VISION/DATE: GL OTHER: IN/EX: IN
FLUHARTY: ID: 14 ARTIC: 25 R: 08 E: 07 T: PASS	FLUHARTY: F-AR- ID: 13 ARTIC: 17 R: 07 E: 08 T: FAIL
FALL: FAIL	FALL: FAIL
ENROLLED/THERAPY: YES	ENROLLED/THERAPY: YES
NOTES: J : TOQUE/HAT	NOTES: : TOQUE/HAT

SUB#: 098 AGE: 5/04 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 099 AGE: 5/09 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/89 VISION/DATE: GL OTHER: IN/EX: IN
: FLUHARTY: FE ID: 15 ARTIC: 29 R: 10 E: 06 T: FAIL	FLUHARTY: FI-R- ID: 12 ARTIC: 30 R: 07 E: 09 T: FAIL
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: J	NOTES:
SUB#: 102 AGE: 5/03 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 103 AGE: 5/04 HM: 1 SES/IN: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
	FLUHARTY: ID: 14 ARTIC: 27 R: 09 E: 10 T: PASS
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES:	NOTES: : TOQUE/HAT

SUB#: 104 AGE: 5/05 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1T HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 105 AGE: 6/00 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
: FLUHARTY: FR- ID: 13 ARTIC: 30 R: 07 E: 07 T: FAIL	
FALL: FAIL-RS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: : TOQUE/HAT : SUB#: 109 AGE: 5/08 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	NOTES:  SUB#: 110 AGE: 5/08  HM: 1 SES/IN.: 1  LANG: 1 STATUS: 1  HEARING/DATE: P/82 VISION/DATE: P/82  OTHER: IN/EX: IN
FLUHARTY:	FLUHARTY: ID: 13 ARTIC: 30 R: 09 E: 10 T: PASS
ID: 15 ARTIC: 29 R: 10 E: 07 T: PASS	FALL: PASS
FALL: PASS	ENROLLED/THERAPY: NO
ENROLLED/THERAPY: NO	NOTES:
NOTES:	: TOQUE/HAT

SUB#: 112 AGE: 5/10 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: GL OTHER: IN/EX: IN	SUB#: 113 AGE: 5/02 HM: I SES/IN.: I LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
: FLUHARTY: F-R- ID: 14 ARTIC: 28 R: 07 E: 07 T: FAIL	
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: J : TOQUE/HAT	NOTES: : TOQUE/HAT
SUB#: 114 AGE: 5/06 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN	SUB#: 117 AGE: 5/10 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: IN
: FLUHARTY: ID: 15 ARTIC: 30 R: 08 E: 09 T: PASS	FLUHARTY: ID: 15 ARTIC: 30 R: 09 E: 09 T: PASS
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: J	NOTES: : CAP/HAT

SUB#: 009 AGE: 6/01 HM: 0 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: EX	SUB#: 010 AGE: 5/05 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: F/82 OTHER: IN/EX: EX
FLUHARTY:  TD: 14 ARTIC: 28 R: 10 E: 09 T: PASS	FLUHARTY: ID: 13 ARTIC: 28 R: 08 E: 09 T: PASS
FALL: PASS	FALL: PASS
	ENROLLED/THERAPY: NO
ENROLLED/THERAPY: NO  NOTES: TOQUE/HAT  SUB#: 011 AGE: 5/11 HM: 0 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: EX	NOTES: : TOQUE/HAT  SUB#: 013 AGE: 5/03 HM: 0 SES/IN:: 1
	LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: EX
: FLUHARTY: ID: 15 ARTIC: 30 R: 09 E: 10 T: PASS	
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: J	NOTES: J : TOQUE/HAT

	TY: FI- ARTIC		R: 09	E:	09	T:	FAI
FALL:	PASS						:
ENROLL	ED/THER	APY:					•
HM: 0	E/HAT D26 AG SES/IN I STAT	.: 1	11				
HEARING OTHER:	G/DATE:	P/82	VISI	ON/DA	TE:	₽/8	32
	EX						
IN/EX:							-
IN/EX:							-
IN/EX:		-RESU	LTS	~		 T:	:

SUB#: 016 AGE: 6/02

HM: 1 SES/IN.: 0

SUB#: 015 AGE: 6/10

SUB#: 027 AGE: 5/04  HM: 1 SES/IN.: 0  LANG: 0 STATUS: 1TR  HEARING/DATE: P/82 VISION/DATE: F/82  OTHER: IN/EX: EX	SUB#: 029 AGE: 5/11 HM: 1 SES/IN.: ? LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: F/82 OTHER: IN/EX: EX
RESULTS: FLUHARTY: FR- ID: 14 ARTIC: 28 R: 07 E: 07 T: FAIL	
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: : TOQUE/HAT	NOTES: J : TOQUE/HAT
SUB#: 038 AGE: 5/09 HM: 0 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: EX	SUB#: 043 AGE: 5/07 HM: 1 SES/IN.: 0 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: GL OTHER: IN/EX: EX
:	======================================
FLUHARTY: FE ID: 15 ARTIC: 30 R: 10 E: 06 T: FAIL	FLUHARTY: ID: 15 ARTIC: 30 R: 08 E: 07 T: PASS
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES:	NOTES:

SUB#: 044 AGE: 5/10 HM: 1 SES/IN: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: F/82 OTHER: IN/EX: EX	SUB#: 045 AGE: 5/06 HM: 1 SES/IN.: 0 LANG: 1 STATUS: 1T HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: EX
FLUHARTY: ID: 14 ARTIC: 30 R: 10 E: 09 T: PASS	
FALL: PASS	FALL: FAIL-RS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: : TOQUE/HAT	NOTES:
SUB#: 047 AGE: 5/06 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: F/82 OTHER: IN/EX: EX	SUB#: 048 AGE: 5/07 HM: 1 SES/IN.: 0 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: EX
FLUHARTY: ID: 14 ARTIC: 26 R: 09 E: 08 T: PASS	FLUHARTY: ID: 15 ARTIC: 27 R: 09 E: 10 T: PASS
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: J : TOQUE/HAT	NOTES:

SUB#: 053 AGE: 5/11 HM: 0 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: EX	SUB#: 054 AGE: 5/03 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: F/82 OTHER: IN/EX: EX
FLUHARTY: ID: 15 ARTIC: 30 R: 10 E: 10 T: PASS	FLUHARTY: ID: 15 ARTIC: 30 R: 09 E: 08 T: PASS
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES:	NOTES:
SUB#: 055 AGE: 5/07 HM: 0 SES/IN.: 1 LANG: 1 STATUS: 1T HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: EX	SUB#: 060 AGE: 6/01 HM: 0 SES/IN: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: EX
	FLUHARTY: ID: 15 ARTIC: 30 R: 08 E: 10 T: PASS
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: J	NOTES:

SUB#: 070 AGE: 6/02 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: F/82 OTHER: IN/EX: EX	SUB#: 072 AGE: 6/02 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 0 SPED HEARING/DATE: P/82 VISION/DATE: F/82 OTHER: IN/EX: EX
	FLUHARTY: FI-RE ID: 13 ARTIC: 26 R: 04 E: 02 T: FAIL
FALL: FAIL	FALL: FAIL
ENROLLED/THERAPY: YES	ENROLLED/THERAPY: YES
NOTES: J : TOQUE/HAT	NOTES: : TOQUE/HAT
SUB#: 084 AGE: 6/01 HM: 1 SES/IN.: 0 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: EX	SUB#: 087 AGE: 5/06 HM: 1 SES/IN.: 0 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: EX
FLUHARTY: ID: 15 ARTIC: 30 R: 10 E: 10 T: PASS	FLUHARTY: ID: 14 ARTIC: 30 R: 08 E: 10 T: PASS
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES:	NOTES: : TOQUE/HAT

SUB#: 088 AGE: 5/03 HM: 1 SES/IN.: 0 LANG: 1 STATUS: 1T HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: EX	SUB#: 089 AGE: 5/08 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1T HEARING/DATE: F/82 VISION/DATE: P/82 OTHER: IN/EX: EX
	FLUHARTY: ID: 13 ARTIC: 30 R: 09 E: 09 T: PASS
FALL: FAIL-RS	FALL: FAIL-RS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: : TOQUE/HAT	NOTES: J : TOQUE/HAT
SUB#: 092 AGE: 5/08 HM: 1 SES/IN.: 0 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: EX	SUB#: 095 AGE: 6/01 HM: O SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: EX
FALL: FAIL	FALL: PASS
ENROLLED/THERAPY: YES	ENROLLED/THERAPY: NO
NOTES: J : TOQUE/HAT	NOTES: J

SUB#: 096 AGE: 5/10 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1T HEARING/DATE: P/82 VISION/DATE: F/82 OTHER: IN/EX: EX	SUB#: 097 AGE: 6/01 HM: 0 SES/IN.: 0 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: EX
	FLUHARTY: ID: 15 ARTIC: 30 R: 10 E: 10 T: PASS
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: : TOQUE/HAT	NOTES: : CAP/HAT
SUB#: 100 AGE: 5/03 HM: 1 SES/IN:: 1 LANG: 1 STATUS: 0 SPED HEARING/DATE: F/82 VISION/DATE: P/82 OTHER: IN/EX: EX	SUB#: 101 AGE: 5/03 HM: O SES/IN.: 0 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: EX
FALL: FAIL	FALL: PASS
ENROLLED/THERAPY: YES	ENROLLED/THERAPY: NO
NOTES: : TOQUE/HAT	NOTES:

SUB#: 106 AGE: 6/01 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: F/82 OTHER: IN/EX: EX	SUB#: 108 AGE: 6/02 HM: O SES/IN.: O LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: EX
: FLUHARTY: FI ID: 13 ARTIC: 30 R: 08 E: 10 T: FAILT	FLUHARTY: ID: 14 ARTIC: 30 R: 09 E: 10 T: PASS
FALL: PASS	FALL: FAIL
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: YES
NOTES: : TOQUE/HAT	NOTES: J : TOQUE/HAT SUB#: 115 AGE: 5/03
SUB#: 111 AGE: 5/07  HM: O SES/IN.: 1  LANG: 1 STATUS: 1  HEARING/DATE: P/82 VISION/DATE: P/82  OTHER: IN/EX: EX	HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1T HEARING/DATE: P/82 VISION/DATE: F/82 OTHER: IN/EX: EX
	: FLUHARTY: FRE ID: 14 ARTIC: 25 R: 06 E: 04 T: FAIL
FALL: PASS	FALL: FAIL
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: YES
NOTES: J : TOQUE/HAT	NOTES: : TOQUE/HAT

'n
æ
9
10
7
$\sim$

SUB#: 116 AGE: 5/09 HM: 1 SES/IN:: 0 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: EX	SUB#: 118 AGE: 5/07 HM: 1 SES/IN.: 0 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: P/82 OTHER: IN/EX: EX
: FLUHARTY: ID: 14 ARTIC: 30 R: 08 E: 10 T: PASS	
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: J : TOQUE/HAT	NOTES:
SUB#: 005 AGE: 5/04 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1T HEARING/DATE: P/82 VISION/DATE: P/82 GTHER: NOT ON COUNT-DROP IN/EX: OUT	SUB#: 039 AGE: 5/04 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 0 HEARING/DATE: DROP VISION/DATE: F/82 OTHER: NOT ON COUNT-DROP IN/EX: OUT
FLUHARTY: ID: 15 ARTIC: 30 R: 09 E: 10 T: PASS	
FALL: NO FALL SCREEN	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: J	NOTES:

SUB#: 046 AGE: ? HM: ? SES/IN.: ? LANG: ? STATUS: ? HEARING/DATE: ? VISION/DATE: ? OTHER: NOT ON COUNT-DROP IN/EX: OUT	SUB#: 059 AGE: 5/07 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1T HEARING/DATE: P/82 VISION/DATE: DROP OTHER: NOT ON COUNT-DROP IN/EX: OUT
FLUHARTY: ID: ARTIC: R: E: T:	
FALL:	FALL: PASS
ENROLLED/THERAPY:	ENROLLED/THERAPY: NO
NOTES: : STUDENT NOT FOUND; DROPPED	NOTES: : TOQUE/HAT
SUB#: 062 AGE: 5/03 HM: 1 SES/IN: 1 LANG: 1 STATUS: 1 HEARING/DATE: DROP VISION/DATE: P/82 OTHER: NOT ON COUNT-DROP IN/EX: OUT	SUB#: 063 AGE: 7/02 HM: 1 SES/IN.: 1 LANG: 1 STATUS: 1 HEARING/DATE: DROP VISION/DATE: P/82 OTHER: NOT ON COUNT-DROP IN/EX: OUT
	RESULTS: FLUHARTY: FRE ID: 15 ARTIC: 29 R: 07 E: 05 T: FAIL
FALL: PASS	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: : TOQUE/HAT	NOTES: : DEORDED: AND ACE-O

: DROPPED; AND AGE=0

SUB#: 080 AGE: 5/03  HM: 1 SES/IN.: 1  LANG: 1 STATUS: 1T  HEARING/DATE: P/82 VISION/DATE: P/82  OTHER: NOT ON COUNT-DROP  IN/EX: OUT	SUB#: 107 AGE: 5/03 HM: 1 SES/IN:: 1 LANG: 1 STATUS: 1 HEARING/DATE: P/82 VISION/DATE: DROP OTHER: NOT ON COUNT-DROP IN/EX: OUT
======================================	:
FLUHARTY: ID: 14 ARTIC: 27 R: 10 E: 09 T: PASS	FLUHARTY: 1D: 15 ARTIC: 30 R: 10 E: 08 T: PASS
FALL: DROPPED	FALL: PASS
ENROLLED/THERAPY: NO	ENROLLED/THERAPY: NO
NOTES: : TOQUE/HAT : DROPPED BEFORE FALL SCREEN COMPLETED	NOTES: J
SUB#: 119 AGE: HM: SES/IN.: LANG: STATUS: HEARING/DATE: VISION/DATE: OTHER: MISSED-OK ATTENDANCE IN/EX: OUT	SUB#: 120 AGE: HM: SES/IN.: LANG: STATUS: HEARING/DATE: VISION/DATE: OTHER: MISSED-OK ATTENDANCE IN/EX: OUT
THY DATA OF THE PROPERTY OF T	
FALL:	FALL:
ENROLLED/THERAPY:	ENROLLED/THERAPY:
NOTES:	NOTES:

SUB#: 121 AGE: HM: SES/IN.: LANG: STATUS: HEARING/DATE: VISION/DATE: OTHER: MISSED-OK ATTENDANCE IN/EX: OUT	SUB#: 122 AGE: HM: SES/IN.: LANG: STATUS: HEARING/DATE: VISION/DATE: OTHER: MISSED-OK ATTENDANCE IN/EX: OUT
FLUHARTY: ID: ARTIC: R: E: T:	FLUHARTY: ID: ARTIC: R: E: T:
FALL:	FALL:
ENROLLED/THERAPY:	ENROLLED/THERAPY:
NOTES:	NOTES:
SUB#: 123 AGE: HM: SES/IN.: LANG: STATUS: HEARING/DATE: VISION/DATE: OTHER: MISSED-OK ATTENDANCE IN/EX: OUT	SUB#: 124 AGE: HM: SES/IN.: LANG: STATUS: HEARING/DATE: VISION/DATE: OTHER: MISSED-OK ATTENDANCE IN/EX: OUT
FLUHARTY: ID: ARTIC: R: E: T:	: FLUHARTY: ID: ARTIC: R: E: T:
FALL:	: FALL:
ENROLLED/THERAPY:	ENROLLED/THERAPY:
NOTES:	NOTES:

SUB#: 125 AGE: HM: SES/IN.: LANG: STATUS: HEARING/DATE: VISION/DATE: OTHER: MISSED-STAR IN/EX: OUT	SUB#: 126 AGE: HM: SES/IN.: LANG: STATUS: HEARING/DATE: VISION/DATE: OTHER: MISSED-STAR IN/EX: OUT
======================================	RESULTS:
FLUHARTY: ID: ARTIC: R: E: T:	FLUHARTY: ID: ARTIC: R: E: T:
FALL:	FALL:
ENROLLED/THERAPY:	ENROLLED/THERAPY:
NOTES:	NOTES:
SUB#: 127 AGE: HM: SES/IN.: LANG: STATUS: HEARING/DATE: VISION/DATE: OTHER: MISSED-STAR IN/EX: OUT	SUB#: 128 AGE: HM: SES/IN.: LANG: STATUS: HEARING/DATE: VISION/DATE: OTHER: MISSED-STAR IN/EX: OUT
RESULTS:	RESULTS:
FLUHARTY: ID: ARTIC: R: E: T:	FLUHARTY: ID: ARTIC: R: E: T:
FALL:	FALL:
ENROLLED/THERAPY:	ENROLLED/THERAPY:
NOTES.	NOTES:

SUB#: 129 AGE: HM: SES/IN.: LANG: STATUS: HEARING/DATE: VISION/DATE: OTHER: MISSED-POOR ATTENDANCE IN/EX: OUT	SUB#: 130 AGE: HM: SES/IN.: LANG: STATUS: HEARING/DATE: VISION/DATE: OTHER: MISSED-POOR ATTENDANCE IN/EX: OUT
FLUHARTY: ID: ARTIC: R: E: T:	
FALL:	FALL:
ENROLLED/THERAPY:	ENROLLED/THERAPY:
NOTES:	NOTES:
SUB#: 131 AGE: HM: SES/IN.: LANG: STATUS: HEARING/DATE: VISION/DATE: OTHER: MISSED-POOR ATTENDANCE IN/EX: OUT	SUB#: 132 AGE: HM: SES/IN.: LANG: STATUS: HEARING/DATE: VISION/DATE: OTHER: MISSED-POOR ATTENDANCE IN/EX: OUT
FLUHARTY: ID: ARTIC: R: E: T:	RESULTS: FLUHARTY: ID: ARTIC: R: E: T:
FALL:	FALL:
ENROLLED/THERAPY:	ENROLLED/THERAPY:
NOTES:	NOTES:

SUB#: 133 AGE: HM: SES/IN.: LANG: STATUS: HEARING/DATE: VISION/DATE: OTHER: MISSED-POOR ATTENDANCE IN/EX: OUT
FLUHARTY:
ID: ARTIC: R: E: T:
FALL:
ENROLLED/THERAPY:
NOTES:

### APPENDIX III

TEST ADMINISTRATION AND SCORING

"The test should be given in a well-lighted room, free from distractions. The table on which objects for the test are to be placed should be clear of all other materials.

Before administering the test, make certain that he objects you will be presenting to the child are arranged together in a container (a shoe box works well) where you can reach them quickly and easily. It is a good idea to run through the test be yourself a few times to become familiar with handling the materials.

First, fill in the information requested at the top of the test form.

Then introduce the test to the child by saying, "We're going to play a
game. Let's see what we have!"

Important note: You may repeat test items in all of the sections only twice for the child. If the desired response is not obtained after two repetitions, mark the item incorrect.(\*SEE NOTE.)

Section A: Identification and Articulation

Check the test form for the order in which the 15 items should be presented. One at a time, present each of the 14 objects to the child and ask, "!What is this?"

For item 5, teeth, point to your own teeth and ask, "What are these?"

For items 7 and 12, window and chair, indicate a window And a chair in

the test room (if the room is windowless, present a picture of a

window cut out of a magazine.).

Item 15 is presented by asking the question, "Are you a boy/girl?" If an affirmative response other than the word yes is made for this item, yes should then be stimulated for the articulation task. For example:

Examiner: Are you a girl? Child: I'm Joyce.

Examiner: Is "Joyce" a girl?

Child: Yes.

Whenever an identification response varies for any of the 15 items, the target word should be stimulated for the articulation task. Example for item 1:

Examiner: What is this?

Child: Cap.

Examiner: Say, "hat."

Child: Hat.

Scoring

The child is given credit for identifying correctly each of the 15 items

presented. Place a check mark in the identification column on the score sheet for each correct response.

Regional and dialectical synonyms, such as "sack" or "poke" for item 1, bag, should be accepted as correct t identifications. (See Regional Dialects, page 10.) The stimulus word should then be elicited in order to evaluate the child's production of the target phonemes. In the example just given the child would be judged correct for the identification task, after which his or her production of the phonemes would be judged and scored.

Articulation errors (distortions, substitutions, omissions) should be noted under the columns marked First phoneme and Second Phoneme. Acceptable differences for children speaking Black dialect are indicated on the test form. Place a check mark in the boxes provided for each correct articulation response.

Maximum scores for Section A are 15 for Identification and 30 for articulation.

Section B:Comprehension

This section contains ten test items. Display and remove the objects for each test item, as indicated on the test form in parentheses.

Items 1,6,9, and 10 require no instructions for the child. Simply repeat the sentences that appear under the column Stimulus Item. All the other test items, which are marked with an asterisk, you should precede with the instruction, "Show me," followed by the appropriate sentence. For several of the test items, a number of objects are displayed at one time to avoid answer cuing.

## Scoring

The child is given credit for every correct response to the ten sentences in this section. Although only a correct nonverbal response is required for each item, a correct verbal response in addition to or instead of a nonverbal response should be credited. (See the test form for acceptable responses.) Place a check mark for each correct response in the blanks provided on the test form. The maximum score for Section B is 10 for Comprehension.

## Section C:Repetition

Ten test items make up this section. Use picture cards 1-10 provided in the test package as stimulus materials for the sentences to be repeated by the child. Introduce this part of the test to the child by saying, i"!I am going to show you some pictures. I will then tell you a short story about each picture. Listen to it. Then tell me the same story I told you. Ready? (Display picture card #1 for the child to see.) Say, 'The girls have the presents.'" Each subsequent picture card and sentence is preceded4 only by the direction, "say."

All ten sentences are printed on the test sheet. The signal word or words for each phrase structure are underlined.

# Scoring

For each sentence the child repeats correctly, place. a check mark in the blank to the left of the corresponding numeral on the test form. When element element of a sentence is omitted, transposed or substituted with a different response, however, an alternate scoring method is used. Place a check mark on the blank line below the syntactic and/or morphophonemic element that is changed by the child.

All sentences in which elements are changed must be judged as "acceptable" or "unacceptable." If, after analyzing a response, you later judge it to be acceptable, place a check mark to the left of that sentence. The overriding concern is that the child's response be grammatically correct representations of the kernal sentences and transformations of the original model on the test form. Examples follow.

Model 1: The girls have the presents.

S--NP+V(TRANS.)+NP

Acceptable

The girls have presents.

They have the presents.

They have some presents.

The girls have two presents.

The girl have the presents. (Black dia.)

The girl has the present. (Black dia.)

Unacceptable

Girls have presents.

Girls have the presents.

Girls presents.

Girls the presents have.

Model 2: The man is a football player.

S NP+V(to be)+NP, T/embedding

Acceptable

He is a football player.

He's a football player.

The man's a football player.

The man a football player. (Black dia.)

He a football player. (Black dia.)

Him a football player. (Black dia.)

Unacceptable

He play football.

The man plays football.

The man has a football.

Men football.

Model 3: The baby is little.

S NP+V(to be)+Adj.

Acceptable

That baby is little.

He's little.

```
The baby little (Black dia.)
He little.(Black dia.)
Unacceptable
Mommy has a baby.
Little.
Baby little.
Mommy baby.
Model 4: They are walking.
        S NP+V(intrans.), T/pronoun
Acceptable
The people are walking.
The boy and girl are walking.
They walking.(Black dia.)
They walkin (Black dia.)
Them walkin. (Black dia.)
Unacceptable
They walk.
The people walk.
Walking.
Model 5: The bus is here.
        S NP+V(to be)+Adv.
Acceptable
```

The bus is on the corner. The bus here. (Black dia.) Unacceptable See bus? Ride a bus. Model 6: That is her cat. S NP; V(to be)+NP, T/pronoun Acceptable That's the lady's cat. That her cat. (Black dia.) Unacceptable She has a cat. Her cat. Model 7: The man can't reach. T/negation Acceptable The man couldn't reach. He can't reach. Unacceptable Man reach.

He no reach.

```
Model 8: The girl said, "Who is it?"
         T/wh-question
 Acceptable
 She said, "Who is it?"
The girl say, "Who is it?" (Black dia.)
She say, "Who is it?"(Black dia.)
Unacceptable
"Who is it?"
Girl, "Who is it?"
Model 9: The boy said, "Blow hard!"
        T/imperative
Acceptable
He said, "Blow hard!"
He say, "Blow hard!"(Black dia.)
Unacceptable
"Blow hard!"
Boy say, "Blow hard!"
Model 10: The ice cream fell.
         S NP+V(intrans.)
Acceptable
Her ice cream fell.
The girl's ice cream fell.
```

The girl ice cream fell. (Black dia.)

Unacceptable

Ice cream fall.

Ice cream fell.

According to information contained in dialect studies, certain syntactic differences may be expected within in the ten sentences in this section. These differences include omission of is and are in the present progressive structures and in statements of being ("He a man"), invariant be substitution for is in statements of being ("He be mean"), question inversion ("He want to know, did you go?")(Wolfrom,1969; Fasold and Wolfram, 1970). The scoring of dialects is discussed further under Regional Dialects, page 10.

The maximum score for Section C is 10 for Repetition.

Interpretation

Total the child's correct responses for each of the four test areas (identification, articulation, comprehension, repetition) and record the totals in the appropriate spaces provided in the chart labeled "Total Scores" on the test form. Compare the Child's four totals with the cut-off scores for children of his or her age.

A child fails the screening test if one or more of his or her four

scores fall below the cut-off scores for the child's age group. If a child passes the screening test if all four of his or her scores fall at or above the cut-off scores for the child's age group.

This screening test does not diagnose speech and language problems; rather, it identifies those children for whom a diagnostics evaluation on of speech and language is recommended.

## Regional Dialects

When the screening test is to be used with a population in which a regional dialect is present, a pilot study is recommended. This involves randomly selecting a minimum of 20 children from the particular dialect-speaking group and administering the test to them. All responses that differ from the target responses in the test should be listed, and their frequency charted. Example:

N=20

Section A,item 2:

bag/"poke" % of occurrence

15/20 75%

If the occurrence of a different response is 60% or greater, the alternate response can be judged to be acceptable only for members of that particular dialect-speaking group. In this manner, you can determine common, dialect-related response differences. Scoring

should then be altered accordingly".

(TAKEN FROM- Fluharty Preschool Speech and Language Screening Test; Nancy Buono Fluharty; Guide; 1978; pp.4-10.)

### \*NOTE:

In two items on the Identification Task of this test, the following processes of scoring were used:

- (1) a. Eight of the 72 subjects used "cap" for "hat". This response was scored as correct. (In the student data cards in APPENDIX II, this is noted as "NOTES:CAP/HAT.").
- b. Thirty-five of the 72 subjects used "toque" (/tuk/) for "hat". This response was scored as incorrect. "Toque" appeared to be a local synonym for hat, but when charted by frequency of occurrence as Fluharty suggested, less than 60% of the subjects It was therefore not considered used the response. alternative response by the test guidelines. (This substitution in the data section of APPENDIX ΙI is noted as, "NOTES: TOQUE/HAT").
- (2) Twenty-three of the 72 subjects used {"jam" for "jelly", but correctly responded to "What else can you call this?"

  Therefore, those students responding in this manner were given credit for the item. (This event is marked as, "NOTES:J" in APPENDIX II.)