THE RELATIONSHIP BETWEEN HEARING IMPAIRMENT AND THE COMPREHENSION OF IDIOMATIC EXPRESSIONS BY JUNIOR HIGH DEAF STUDENTS IN A LARGE SUBURBAN SCHOOL DISTRICT

A THESIS

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We hereby recommend that the thesis prepared under our supervision by Regina S. Burton entitled The Relationship Between Hearing Impairment and the Comprehension of Idiomatic Expressions by Junior High Deaf Students in a Large Suburban School District

be accepted as fulfilling this part of the requirements for the Degree of Master of Arts.

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To protect individuals we have covered their signatures.

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This study is dedicated to the idea that hearing impaired students can and should be exposed to the richness of our language through instruction in figurative language and idiomatic expressions. From the beginning, Dr. Kathleen Jongsma served as chairperson of the thesis committee. Her congenial support and guidance were quite helpful in the development of the research design and writing of the thesis. Her commitment to quality education has been a constant inspiration to me throughout my entire master's degree program. Dr. Rodney Short and Dr. Margaret Griffin's reviews of the prospectus were very helpful. Dr. Sidney Bergquist and Dr. Sam Brown have also served as committee members. Their guidance and review of the thesis have been quite useful. I appreciate the willingness of the administrative staff of the Richardson Independent School District for allowing me to carry out the study in the classroom.

The students who participated in the study represent vast numbers of deaf students who have progressed through the school years with minimal success in reading, but who are eager to learn and compete in society as equals to their hearing peers. They were the inspiration of this research.

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CHAPTER 1

INTRODUCTION

Background of the Problem

The gross deficiency in reading achievement of deaf children is a chronic problem. Many researchers have indicated that it is quite uncommon for the deaf to read beyond the fourth-grade level (Wrightstone, 1963; Cooper & Rosenstein, 1966; Furth, 1966; DiFrancesca, 1972; Gibson & Levin, 1975). Trybus and Karchmer (1977) report that "the difference between the mean line (of national reading comprehension scores) for hearing children and the mean line for hearing impaired children increases from about a grade and a half at age 9 to more than five grades by age 14" (p. 64). Hargis (1970) indicates that this discrepancy increases to "approximately eight years if the comparison is made when children complete their regular educational programs" (p. 27).

Many possible answers to the beguiling question of why the deaf have difficulty reading have been documented. Weiner and Cromer (1967) formulated four models to account for reading failure: defect, deficit, disruption, and difference. The defect model maintains that deafness is a profound sensory impairment that prohibits mastery of

the cognitive process of reading. The deficit model suggests that the deaf do not have access to the necessary phonological and syntactic information to achieve success in learning to read. The disruption model states that an emotional disturbance or hyperactive condition interferes with the child's attention to the reading task. Finally, the difference model of reading failure in the deaf points out the mismatch between the traditional method of instruction (oral English) and the child's native language (sign) (Weiner & Cromer, 1967). Gormley and Franzen (1978) report that the difference model is "the most appropriate for examining why most deaf readers do not function like hearing readers nor progress to the hearing population's level of proficiency" (p. 544).

Written English should be thought of as a second language for the deaf child whose native language is sign (Stokoe, 1975). Hargis (1970) states that "deaf children do not bring to school a mastery of the language, especially its syntactical or grammatical structure or its common idiom and figurative elements" (p. 27). He adds that for deaf children who are struggling to learn every aspect of the English language, much consideration should extend to syntax, common idiom and figurative language, and vocabulary (Hargis, 1970).

Some researchers have pointed out the vital role of idioms in the English language (Chafe, 1967; Makkai,

1969). A number of recent classroom studies have illustrated the occurrence of idioms in school texts and have suggested the need to teach idiomatic language as part of the English language programs in school (Edwards, 1974). Boatner and Gates (1969) report that idioms comprise approximately two-thirds of the English language. Hollingsed (1958) found between 107 and 310 idioms per book in four series of basal readers for the middle grades. Adkins (1968), in an investigation of the reading material used by ninth-grade pupils in two high schools, revealed that "basal readers and social studies materials contained an average of 3.32 idioms and figures of speech per page and that an average textbook of 400 pages contained a sufficient frequency of occurrence of these expressions to question the quality of comprehension" (p. 150).

Scott (1964) theorized that idioms and figures of speech in the English language would be quite puzzling to the non-native student. Adkins' (1968) results of testing non-native speakers of English revealed that idioms and figures of speech, while constituting a meaningful part of the English with which students must cope, are not readily understood.

Significance of the Problem

An investigation into the understanding and teaching

of idiomatic expressions reveals the importance of auditory comprehension of language. Turner (1976) states that "every hearing child has heard uncountable figurative expressions and understands, at least at some level, most of them" (p. 758). Hearing children begin to imitate these expressions at a young age, and by the time they encounter them in reading, most children have a large number of idiomatic terms in their speaking vocabularies (Turner, 1976). Children imitate these figures of speech because they like the sound of them. Deaf children, obviously, do not have this advantage. Edwards (1974) reports that "if a child has had little or no experience in identifying and understanding the complexities of idiomatic language, he will be at a disadvantage when confronted with idioms in his reading material" (p. 288). Turner (1976) agrees that the ability to recognize and understand figurative language is crucial to successful reading.

"Understanding figurative language involves thinking which is more abstract and complex than that required for literal comprehension" (Turner, 1976, pp. 758-759). A reason for deaf children's reading difficulty with figurative language may be their inexperience with these abstractions. The deaf student's difficulty in dealing with abstract language has been reported in several studies (Morgan, 1968; Dry, 1973; Fusaro & Slike, 1979).

Statement of the Problem

The problem to be investigated in this study was the relationship between hearing impairment and the comprehension of idiomatic expressions by junior high deaf students in a large suburban school district.

Purpose of the Study

The purpose of this study was to test the following null hypotheses and research questions:

Null Hypotheses

1. There will be no significant relationship between sex and the deaf students' comprehension of idioms on a sentence-based multiple choice comprehension test.
2. There will be no significant relationship between grade level and the deaf students' comprehension of idioms on a sentence-based multiple choice comprehension test.
3. There will be no significant relationship between degree of hearing loss and the deaf students' comprehension of idioms on a sentence-based multiple choice comprehension test.
4. There will be no significant relationship between reading level and the deaf students' comprehension of idioms on a sentence-based multiple choice comprehension test.

Research Questions

1. What percentage of the deaf students correctly answer the five most important idioms, as those idioms have been determined by their teachers?
2. Which idioms, if any, do all of the deaf students answer correctly?
3. Which idioms seem to be the most difficult for the deaf students to comprehend?

Definition of Terms

For the purpose of this study, the following terms were defined:

1. Idiom

   A small group or collection of words specific to a language, expressing a single notion, or entering with some degree of unity into the structure of a sentence. An idiomatic phrase "cannot be understood from the definitions of the separate words given in ordinary school dictionaries" (Boatner & Gates, 1975, p. vi).

2. Figurative language

   Language which cannot be interpreted literally.

3. Non-native speaker

   One whose first-learned language is not standard English. For the students of this study, the

first-learned language of many would be sign.

4. Moderately severe hearing loss

A hearing loss of 56 to 70 decibals (dB). This degree of hearing loss denotes the minimal auditory requirement for eligibility into the deaf education program of the large suburban school district.

5. Severe hearing loss

A hearing loss of 71 to 90 decibals (dB), as determined by the guidelines of the large suburban school district.

6. Profound hearing loss

A hearing loss of over 91 decibals (dB), as determined by the guidelines of the large suburban school district.

7. Syntax

The arrangement of words in a sentence.

8. Junior high school

A school housing grade levels seven through nine inclusively.

9. Suburban school district

A school district located within commuting distance of a city of over 300,000 population.

10. Comprehension

The degree to which deaf students understand

idioms, as determined by their scores on the researcher-constructed idiom test.

Assumptions

For the purpose of this study, the following assumptions were made:

1. The idiom test has content and face validity established through the procedures of test development and the thorough screening by deaf educators.
2. The deaf education teachers' idiom choices truly reflect the teachers' ideas of which idioms are most important for their students to understand.
3. Multiple choice answers adequately reflect deaf students' comprehension of idiomatic expressions in context.
4. The low comprehension of idiomatic expressions by deaf students affects their reading ability, which partially accounts for the low reading levels of deaf students.

Limitations

For the purpose of this study, the following limitations were cited:

1. The deaf students selected comprised the entire

population of deaf junior high students in a given school district. Any generalizations are limited to hearing impaired students in this suburban school district or to students in other school districts who have similar academic, physical, and economic backgrounds.

2. The instrument tested only fifty common idioms and, therefore, cannot truly reflect the deaf students' comprehension of all idiomatic expressions.
3. The instrument was administered only once. An additional administration of the test might have produced a different indication of the deaf students' comprehension of idioms.
4. Students identified idioms in the context of a multiple choice task. Students were not asked to write the meaning of a given idiom or to explain what an idiom might mean. Some idioms may have been correctly identified through guessing, rather than through knowledge of idiom meaning.

Summary

This section of the thesis established the problem of deficiency in reading achievement of deaf children,

especially in the area of figurative language and idiomatic expressions. Several research questions for this study were formulated and terms were defined. Limitations and assumptions were made concerning the study.

CHAPTER II

REVIEW OF THE LITERATURE

In the following section, the researcher will discuss selected literature concerning the effects of hearing impairment on reading achievement. Variables which affect the deaf child's reading comprehension will be considered. This chapter focuses on idiomatic expressions and their effect on the deaf child's reading ability.

Deafness and Reading Achievement

The failure of the deaf to learn to read has been well documented (Furth, 1966; Gibson & Levin, 1975). Gormley and Franzen (1978) suggest that the deaf reader should not be viewed as defective or deficient, but merely different. "While it has been repeatedly demonstrated that the deaf do not accurately recall syntactical structures and have great difficulty with certain syntactic structures, such as the passive, this apparent lack of knowledge may bear little relationship to the reading process in the deaf" (Gormley & Franzen, 1978, p. 545).

National Data on Reading Achievement. The comparison of hearing impaired readers to hearing readers has been a constant source of frustration for professionals

in the field of deaf education. In 1963, Wrightstone, Aronow, and Moskowitz (1963) published Special Deaf Norms for the Metropolitan Elementary Reading Test. Their purpose was "to measure the reading progress of deaf children in comparison with other deaf children, rather than with hearing children for whom norms are available on standardized reading tests" (Wrightstone, Aronow, & Moskowitz, 1963, p. 311). The researchers, however, suggest that other variables also be considered such as environmental opportunities, academic aptitude, motivations, emotional traits, physical status, age at onset of hearing loss, and length of regular school attendance (Wrightstone, Aronow, & Moskowitz, 1963).

Furth (1966) used the Special Deaf Norms of the Metropolitan Elementary Reading Test to compare deaf readers with hearing readers. He found that a hearing child who achieves a reading level comparable to the mean score for the deaf child is considered retarded in reading. However, the hearing child's performance is entirely different from that of the deaf child, who may not be at all retarded in reading but simply does not know the language. Furth (1966) suggests that "the measurement of reading disability presupposes a linguistic competence which is not present in the deaf. The low reading level of the deaf does not constitute a reading deficiency but

linguistic incompetence" (Furth, 1966, p. 462).

In 1974, a much more comprehensive set of national norms for hearing impaired students, according to age, was developed and called the Special Edition for Hearing Impaired Students for the 1973 Stanford Achievement Test (Trybus & Karchmer, 1977). The data show the relationships of the following six selected variables to reading achievement level: sex, ethnic group, degree of hearing loss, presence of additional handicaps, age child began school, and parental deafness. Scores reveal the following results: females score slightly higher than males, whites score higher than other ethnic groups, achievement level is inversely related to hearing loss, students with no additional handicaps score higher than those with one or more, children entering school at age five score higher than those entering either earlier or later, and students with two deaf parents score higher than those with either one deaf parent or two hearing parents (Trybus & Karchmer, 1977). The data also show that half the deaf students at age 20 or younger read below a mid-fourth grade level, barely at a newspaper literacy level (Trybus & Karchmer, 1977).

Vocabulary Growth. There have been several studies of vocabulary abilities of the hearing impaired. Cooper and Rosenstein (1966) found the average vocabulary level

of deaf eighteen-year-olds to be about the fourth-grade level. Walter (1978) found that even for the most frequently occurring words, hearing impaired children perform at a level considerably below that of their hearing peers: "the hearing impaired fourteen-year-old student can read correctly about 50 to 60% of the words between the 2,000th and 5,000th most frequently used words in printed English. His hearing fourteen-year-old peer, on the other hand, is functioning at a level of 95 to 97% accuracy; while the ten-year-old hearing student (four years his junior) is performing in the 75 to 85% accuracy range" (Walter, 1970, p. 981). With this limited word knowledge, it is difficult to imagine how the fourteen-year-old deaf student can process junior high school level reading materials which go well beyond this level of word frequency.

On the brighter side, Hammermeister's (1971) study reveals that deaf students acquire a greater vocabulary after leaving high school. She attributes the vocabulary growth to job experiences, social contacts, dependence on newspapers and magazines for information and pleasure, and greater maturity (Hammermeister, 1971).

Fusaro and Slike (1979) found the effect of imagery to be a very significant factor on the ability of hearing impaired children to identify words. Similar studies have

been done by Bond and Tinker (1973), Harris and Sipay (1975), and Hargis and Gickling (1978). Fusaro and Slike's (1979) results indicate imagery greatly influences the ease or difficulty with which the deaf children learn to identify words, with high imagery words (concrete) the easiest to identify and low imagery words (abstract) the hardest to identify.

Literal vs. Interpretive Reading Comprehension. Balow, Fulton, and Peploe (1971) conducted a study of literal and interpretive reading comprehension skills among hearing impaired adolescents. Their findings show that the literal comprehension mean grade equivalent score was significantly higher than the interpretive comprehension mean. In the literal comprehension subtests, the students were required to find and associate factual information explicitly stated in the material. The interpretive comprehension subtests required the students to make inferences, judgments, and conclusions from information provided, as well as to make interpretations of tone, mood, and literary qualities (Balow, Fulton, & Peploe, 1971). Even with no time limit, the hearing impaired students were unable to accomplish interpretive-inferential reading nearly as well as they could read for specific factual information. This finding may reveal a tendency toward concreteness in the language and reasoning of

hearing impaired students.

Degree of Hearing Loss. Many authorities consider auditory acuity (ability to hear sounds) and auditory perception (ability to distinguish sounds) to be important to success in reading. Past studies on the topic of degree of hearing loss indicate "that as degree of hearing loss increases, reading achievement becomes poorer, with deaf children usually far below normal in reading age. In many cases where a hearing loss is accompanied by a reading disability, the loss is only for the higher frequency sounds" (Evans, 1969, p. 625). Conrad's (1977) study greatly illustrates the impact of deafness on reading ability. He reports that reading is significantly affected by degree of deafness and by non-verbal intelligence. His findings indicate that almost 50% of the children tested with hearing loss greater than 85 decibals have no reading comprehension at all. For the less deaf children, the comparable value is about 25%. Conrad (1977) generalizes that "taking the entire population of children of school leaving age in schools for the deaf, it can be seen that some 40% are totally illiterate for prose comprehension" (Conrad, 1977, p. 142).

Contextual Constraint on Deaf Readers. Recent studies have suggested that the deaf use quite different types of rules in sentence construction than hearing subjects,

particularly with regard to function words. Odom, Blanton, and Nunnally (1967) compared the performances of deaf and hearing students on a sentence completion test. The deaf students' scores were significantly lower than the hearing students' scores, specifically for adjectives, prepositions, and conjunctions. The extremely low proportion of correct responses made by the deaf may, in part, be attributed to a vocabulary deficit; however, the problem must also lie in the deaf students' lack of knowledge of the idiomatic and semantic uses of syntactic words (Odom, Blanton, & Nunnally, 1967).

Idioms

The term "idiom" can be defined and interpreted in many different ways. Weinrich (1969) defines an idiom as "a complex expression whose meaning cannot be derived from the meanings of its elements" (Weinrich, 1969). Edwards (1974) states that "idioms refer to expressions or phrases which are peculiar to a given language and which carry either a literal meaning or a non-literal meaning depending on the intent of the writer" (Edwards, 1974, p. 288). By contrast, Foerster (1974) defines idiom as "an expression which conveys a meaning other than the literal one" (Foerster, 1974, p. 125). Whichever definition is applied, the idiom can be a comprehension demon

for all readers at one time or another.

Several researchers (Hollingsed, 1958; Adkins, 1968; Boatner & Gates, 1969) have discovered the prevalence of idioms in the English language. A major problem with idioms is that there is no set syntactical principle for identifying or interpreting them in context. Rose (1978) states that idiomatic expressions "exhibit notoriously erratic patterns of syntactic behavior" (Rose, 1978, p. 55). With prevalence and lack of pattern as two of the idiom's major characteristics, it is easy to see why idioms might be a menace to reading comprehension.

Edwards (1974) designed a study to determine whether idioms cause difficulty for children in the reading and understanding of prose. His treatment group scored their highest scores on a test containing no idioms and their lowest scores on a test containing idioms in all items. His results show a positive relationship between the incidence of idioms in test material and the amount of difficulty experienced by the children. Therefore, Edwards concluded, idioms have considerable effect on children's ability to understand prose (Edwards, 1974).

Turner (1976) suggests three reasons why idioms and figurative language, in general, contribute to reading difficulty. "First, understanding figurative language involves thinking which is more abstract and complex than

that required for literal comprehension. A second cause of children's reading difficulty with figurative language is their inexperience with the abstractions involved. A third factor to be considered is that the figures of speech encountered in reading most often are not the same ones that are encountered in oral communication" (Turner, 1976, pp. 758-759).

Many educators have offerred suggestions for teaching idioms and figures of speech in the classroom. Scherer (1977) suggests helping students see comparisons and define words. Foerster (1974) recommends collecting idiomatic expressions and illustrations and categorizing them by topics, such as colors, parts of the body, animals, and food. Hoover (1972) even suggests using the comic strip character Henry to introduce idiomatic expressions to the deaf child. Dry (1973) offers the ideas of illustrating the literal interpretations of idioms and of pantomiming and dramatizing figures of speech in the classroom.

Deafness and Idioms

Very little research has been done on the role of idiomatic expressions in the reading of deaf children. Hargis (1970) reports that deaf children "do not bring to reading instruction a mastery of the English syntax, common

figurative language, and idiom" (Hargis, 1970, p. 29). The deaf child is, essentially, learning English as a second language. Adkins' (1968) study indicates that non-native speakers are deficient in their knowledge of idioms to the point of being handicapped in the ability to understand the contexts in which the idioms appear. Conley (1974) constructed an idiom test and compared the scores of hearing and non-hearing students. She found that even when hearing and deaf children are matched for reading achievement levels, the deaf students are significantly lower in their understanding of idioms. This deficiency partially accounts for the low reading levels of deaf students, since knowledge of idiomatic usage is a necessary skill in reading for the deaf child (Conley, 1974).

Summary

In this chapter, the researcher discussed the literature as it related to deafness and reading achievement. A portion of the chapter dealt with idioms and their contribution to reading difficulty. The chapter included a brief discussion concerning the role of idiomatic expressions in the reading achievement of deaf children.

CHAPTER III

PROCEDURES

The purpose of this study was to determine if there is a relationship between hearing impairment and the comprehension of idiomatic expressions by junior high age deaf students. This chapter describes the study that was conducted by the researcher. Included in the discussion are descriptions of the population, the null hypotheses, the instrument development, the data collection procedures, and the procedures for data analysis.

Population

The 21 subjects selected for this study comprised the entire population of junior high age deaf students of a large suburban school district. All of the subjects attended the same junior high school. Some of the subjects attending the school were also sent from nearby school districts which do not have deaf education programs in their own district. All of the students were at least partially mainstreamed into the regular classroom environment, with the aid of an interpreter or a deaf education teacher. When not mainstreamed, the students were self-contained in a small classroom and taught only by

deaf education teachers. The degree to which an individual student was mainstreamed or self-contained varied with each subject.

The subjects were in the seventh, eighth, and ninth grades and ranged in hearing loss from "moderately severe" to "profound," as classified by the large suburban school district. The reading levels of these students ranged from 2.3 to 9.8 on the Stanford Achievement Test: Reading Comprehension, administered in January of 1981. Seven students were in a low reading level range (2.3-4.1), eight were in a medium range (5.3-5.8), and six had a high reading level range (6.2-9.8). Of the 21 students, eleven were male and ten were female. Four of the subjects were seventh graders, twelve were eighth graders, and five were ninth graders. Two of the deaf students had "moderately severe" hearing losses, five had "severe" hearing losses, and fourteen had "profound" hearing losses.

Null Hypotheses

The following null hypotheses were tested at the .05 level of significance, using chi square.

1. There will be no significant relationship between sex and the deaf students' comprehension of idioms on a sentence-based multiple choice comprehension test.

2. There will be no significant relationship between grade level and the deaf students' comprehension of idioms on a sentence-based multiple choice comprehension test.
3. There will be no significant relationship between degree of hearing loss and the deaf students' comprehension of idioms on a sentence-based multiple choice comprehension test.
4. There will be no significant relationship between reading level and the deaf students' comprehension of idioms on a sentence-based multiple choice comprehension test.

Research Questions

In addition to the null hypotheses, the following research questions were examined:

1. What percentage of the deaf students correctly answer the five most important idioms, as those idioms have been determined by their teachers?
2. Which idioms, if any, do all of the deaf students answer correctly?
3. Which idioms seem to be the most difficult for the deaf students to comprehend?

Instrument Development

The idiom test was developed by the researcher to provide diagnostic information about deaf students' understanding of idioms. The idioms were screened for frequency of occurrence using the following references: Dictionary of American Idioms (1977), A Dictionary of Idioms for the Deaf (1969), and the Book of English Idioms (1975). A list of common idioms was extracted from each of these references and the lists were compared to find idioms which appeared in all three sources. From this screening, a list of 100 common idioms was compiled. This list of 100 was sent to all 13 secondary deaf education teachers in the school district, who were asked to narrow the list down to 25 idioms which they felt were the most important for deaf readers to understand. From these 25, the teachers were also asked to choose the five idioms which they felt are the most important for deaf students to know and should get top priority in reading comprehension. From the 13 teacher responses collected, the list of idioms was narrowed to fifty. A sentence using each of the fifty idioms was constructed. The idiom in each sentence was underlined and followed by four options, one of which could be substituted for the usual meaning of the idiom. Placement of the correct answer was done randomly. All of

the options were grammatically similar and of similar length.

Pilot Testing. The test was piloted with four deaf students at the high school level in the same suburban school district. The test was given to two high reading level students and two low reading level students.

The pilot revealed that administration of the idiom test required 30 to 50 minutes. The correct responses recorded on each test were 33, 34, 38, and 48 out of a total of 50 items. As a result of this pilot, some of the test sentences were reworded, using parallel construction on the four optional responses.

Validity. This idiom test cannot be validated by relating it to another measure since the researcher has found no other similarly constructed idiom test for the deaf or for the hearing population. The test does, however, have content and face validity, based on the rigid screening of the idioms. The references upon which the test is based were developed by experienced educators of the deaf, linguists, and professional definers who were experienced in making dictionaries, and the test was thoroughly evaluated by a group (13) of deaf educators.

Reliability. Reliability was determined for the idiom test by using the split-halves correlation procedure with the data from the odd and even-numbered

sentences of the instrument. Out of 597 total correct responses on the 21 idiom tests, 297 were on odd-numbered items and 300 were on even-numbered items. The reliability coefficient computed for internal consistency of one-half of the test was .54. The Spearman-Brown prophesy (1971) formula was then applied to obtain the reliability of the entire test. The correlation was .70. While a coefficient of .70 is not as strong as the researcher would have wished, this coefficient falls into a moderately high range, and is as strong as many tests which are now commercially published (Shavelson, 1981).

Data Collection

Each student's schedule was checked for a study hall period and the researcher found that each student had at least one study hall period daily with a deaf education teacher. This period was the one set aside for the administration of the test. The researcher tested two to six students each period throughout a regular school day.

The research instrument was administered to the subjects by the researcher in a small classroom environment controlled for outside interruptions and for assistance from deaf education teachers. Assistance from the deaf education teachers, other than explaining instructions, would have been a threat to the instrument's validity.

The students were told that they were going to be given a test to see how well they understood idioms. The researcher stressed that the test results would not affect their grades at all, but that they should try to do their best. They were also told that they were helping the researcher in her college work by taking the test.

The directions were explained to the students' satisfaction; then they continued the test on their own until it was completed. The test was not timed. The students were allowed to work at their own pace without aid and interruptions. No communication was allowed among the students during the testing period. The test was administered and scored by the researcher. The researcher tabulated the scores at the end of the testing day.

Information was gathered on each student to research the relationship between specific variables and the comprehension of idioms. The information collected on each subject was as follows: sex, grade level, degree of hearing loss, and reading level. This information was found in each of the subjects' educational files.

Data Analysis

The test scores were then analyzed in relationship to

sex, grade level, degree of hearing loss, and reading level. Chi square was used to determine these relationships. Summary statistics were calculated: raw scores, mean scores, median scores, and standard deviations. The test responses were examined to determine which idioms were the most and least frequently known by the deaf students. The tests were also examined to determine the percentage of student correct responses on the five most important idioms for deaf students, as previously determined by their teachers. All scores are reported as overall scores and by each of the four variables.

Summary

This chapter stated the procedures for the study. The study was conducted among all junior high age deaf students of a large suburban school district. The students were identified by sex, grade level, degree of hearing loss, and reading level. Each student was administered the idiom test, developed by the researcher to provide diagnostic information about deaf students' comprehension of idioms. Raw scores were subjected to chi square procedures to investigate the relationships among test scores and the classifying variables.

CHAPTER IV

RESULTS

This chapter reports the data which were gathered in order to determine if there is a relationship between hearing impairment and the comprehension of idiomatic expressions. These data are discussed according to the variables which were identified in the research questions and hypotheses. The data were obtained by administering the previously described idiom test.

Summary Statistics

Table 1 gives variable information on each subject, in addition to his or her raw score on the idiom test. On the fifty-item idiom test, five of the 21 subjects had low raw scores with only 19 to 22 correct answers. Eight subjects scored at a medium range with 25 to 30 correct responses and eight subjects had high scores of 31 to 38. These classifications of low, medium, and high scores were determined by the researcher in an attempt to compile three nearly equal groups and also through natural breaks in the scores of the subjects. The overall mean score was calculated to be 28, with a median score of 30. The overall standard deviation was found to be 5.657.

TABLE 1

SUMMARY STATISTICS FOR IDIOM TEST

Subject	Sex	Grade	Degree of Hearing Loss	Standardized Reading Achievement Score	Raw Score on Idiom Test
Student 1	Male	7	Profound	2.6 (low)	19
Student 2	Female	8	Profound	3.8 (low)	19
Student 3	Female	8	Profound	5.3 (medium)	20
Student 4	Male	8	Profound	3.0 (low)	21
Student 5	Female	7	Profound	3.0 (low)	22
Student 6	Male	9	Profound	5.3 (medium)	25
Student 7	Female	8	Moderate	2.3 (low)	26
Student 8	Male	8	Profound	9.8 (high)	26
Student 9	Female	7	Moderate	5.3 (medium)	28
Student 10	Male	8	Profound	5.3 (medium)	28
Student 11	Female	7	Profound	2.9 (low)	30
Student 12	Female	9	Severe	4.1 (low)	30
Student 13	Female	8	Profound	5.8 (medium)	30
Student 14	Female	8	Profound	7.1 (high)	31
Student 15	Male	8	Severe	5.3 (medium)	32
Student 16	Male	9	Profound	6.2 (high)	33
Student 17	Male	9	Severe	5.3 (medium)	34
Student 18	Male	8	Profound	5.3 (medium)	34
Student 19	Female	8	Profound	6.9 (high)	34
Student 20	Male	9	Severe	6.4 (high)	37
Student 21	Male	8	Severe	7.2 (high)	38
					$\bar{X}$ = 28
					Md = 30
					SD = 5.6

TABLE 2

GROUP MEANS, MEDIANS, AND

STANDARD DEVIATIONS FOR IDIOM TEST SCORES

Group	N	$\bar{X}$	Md	SD
Sex				
Male students	11	30	32	6.06
Female students	10	27	29	4.8
Grade Level				
Grade 7 students	4	25	25	4.4
Grade 8 students	12	28	29	5.8
Grade 9 students	5	32	33	4.1
Degree of Hearing Loss				
"Moderately severe" students	2	27	27	1
"Severe" students	5	34	34	3
"Profound" students	14	27	27	5.4
Reading Level				
Low reading students	7	24	22	4.4
Medium reading students	8	29	29	4.4
High reading students	6	33	33	4
Overall	21	28	30	5.657

The statistical information for each of the four variables is compared in Table 2.

Sex of the Student. Of the 21 subjects tested, 11 were male and 10 were female. The males scored between 19 and 38 on the idiom test. The mean score for the males ($\bar{X}$ = 30, SD = 6.06) was higher than the mean score for the females ($\bar{X}$ = 27, SD = 4.8).

Grade Level. The population for this study included four seventh graders, twelve eighth graders, and five ninth graders. The seventh grade raw scores ranged from 19 to 30, the eighth grade scores ranged from 19 to 38, and the ninth grade scores ranged from 25 to 37. These data reveal that the means increase with grade level. The mean score of the seventh graders ($\bar{X}$ = 25, SD = 4.4) was lower than the mean score of the eighth graders ($\bar{X}$ = 28, SD = 5.8). The mean score of the eighth graders was lower than that of the ninth graders ($\bar{X}$ = 32, SD = 4.1).

Degree of Hearing Loss. Two of the 21 subjects had "moderately severe" hearing losses, five had "severe" hearing losses, and 14 had "profound" hearing losses. The two students with "moderately severe" hearing losses scored 26 and 28 on the idiom test. The five students with "severe" hearing losses scored from 30 to 38 on the test. The remaining 14 students with "profound" hearing losses scored from 19 to 34. Based on the literature, one

would expect to find that the idiom scores would decrease as hearing loss increases. These data do not support this assumption as the means for the "moderately severe" students ($\overline{X}$ = 27, SD = 1) and the "profound" students ($\overline{X}$ = 27, SD = 5.4) are exactly the same. The mean score of the students with "severe" hearing losses ($\overline{X}$ = 34, SD = 3) was higher than the mean score of both the students with "moderately severe" and "profound" hearing losses. The low population of available subjects with "severe" hearing losses could account for these results.

Reading Level. The population consisted of seven students with low reading levels, eight students with medium reading levels, and six students with high reading levels. The criteria for determining these reading levels have already been discussed. The low readers' scores on the idiom test ranged from 19 to 30, the medium readers scored from 20 to 34, and the high readers' scores ranged from 26 to 38. The results reveal that the mean scores increase as reading level increases. The mean score of the low readers ($\overline{X}$ = 24, SD = 4.4) was lower than the mean score of the medium readers ($\overline{X}$ = 29, SD = 4.4). The mean score of the medium readers was lower than the mean score of the high readers ($\overline{X}$ = 33, SD = 4).

Chi Square Analyses

The major purpose of this study was to determine relationships between hearing impairment and the comprehension of idiomatic expressions. These relationships were determined by using the results of the idiom test, the previously stated information on each subject tested, and the chi square statistical procedure.

Sex of the Student. The first hypothesis stated that there will be no significant relationship between sex and the deaf students' comprehension of idioms. With two degrees of freedom, the computed value of chi square was 2.658. The relationship was not significant at the .05 level.

Grade Level. The second hypothesis stated that there will be no significant relationship between grade level and the deaf students' comprehension of idioms. With four degrees of freedom, the computed value of chi square was 4.768. The relationship was not significant at the .05 level.

Degree of Hearing Loss. The third hypothesis stated that there will be no significant relationship between degrees of hearing loss and the deaf students' comprehension of idioms. With four degrees of freedom, the computed value of chi square was 8.361. The relationship was not significant at the .05 level.

Reading Level. The fourth hypothesis stated that there will be no significant relationship between reading levels and the deaf students' comprehension of idioms. With four degrees of freedom, the computed value of chi square was 12.077. This relationship was significant at the .05 level. These statistics indicate that comprehension of idioms increases as reading level increases.

Analysis of Idioms

Table 3 reveals the percentage of correct student responses on the five most important idioms for the deaf, determined previously by the secondary deaf education teachers in the school district. The five idioms selected as being the most important for deaf students to know are as follows: 1) "to make ends meet," 2) "pain in the neck," 3) "to turn over a new leaf," 4) "to stand on one's own two feet," and 5) "to be in the doghouse." The most frequently known of these five idioms was found to be "to turn over a new leaf" (86%), with the least frequently known being "pain in the neck" (52%). The group members who appear to have a better understanding of these five idioms are ninth grade males with high reading levels and "severe" hearing losses.

Table 4 gives the ranking of idioms from most to least frequently known, according to the idiom test

TABLE 3

PERCENTAGE OF CORRECT RESPONSES

ON FIVE MOST IMPORTANT IDIOMS

Group	make ends meet	pain in the neck	turn over a new leaf	stand on his own two feet	in the doghouse
Sex					
Male students	73%	64%	91%	82%	55%
Female students	70%	40%	80%	70%	60%
Grade Level					
Grade 7 students	50%	25%	75%	75%	0
Grade 8 students	83%	50%	92%	66%	66%
Grade 9 students	60%	80%	80%	100%	80%
Degree of Hearing Loss					
"Moderately severe" students	100%	0	50%	0	50%
"Severe" students	60%	100%	100%	80%	100%
"Profound" students	71%	43%	86%	86%	43%
Reading Level					
Low reading students	57%	43%	86%	71%	43%
Medium reading students	75%	50%	75%	63%	63%
High reading students	83%	66%	100%	100%	66%
Overall	71%	52%	86%	76%	57%

TABLE 4

RANKING OF IDIOMS -
MOST TO LEAST KNOWN

1. #15 - hot water (100%)
2. #27 - name is mud (100%)
3. #11 - rain cats and dogs (95%)
4. #19 - on the ball (95%)
5. #22 - burn candle at both ends (90%)
6. #43 - under the weather (90%)
7. #17 - turn over a new leaf (86%)
8. # 6 - let the cat out of the bag (81%)
9 #14 - down in the dumps (81%)
10. #32 - on his toes (81%)
11. #46 - through thick and thin (76%)
12. #34 - butterflies in his stomach (76%)
13. #29 - stand on his own 2 feet (76%)
14. #26 - left out in the cold (76%)
15. #21 - play by ear (76%)
16. # 9 - make ends meet (71%)
17. #24 - put cart before the horse (71%)
18. #28 - pull some strings (71%)
19. #31 - slip of the tongue (71%)
20. #50 - broke his heart (71%)
21. #35 - eat his words (66%)
22. #20 - pulling my leg (66%)
23. #10 - beat his head against a wall (62%)
24. #18 - spill the beans (62%)
25. #48 - in the doghouse (57%)
26. #23 - fly off the handle (57%)
27. #33 - get up on wrong side of bed (57%)
28. # 4 - kick the bucket (57%)
29. #16 - pain in the neck (52%)
30. #40 - butter up (52%)
31. #41 - give the cold shoulder (48%)
32. #42 - by heart (48%)
33. # 3 - make a mountain out of a molehill (43%)
34. #38 - gave a piece of his mind (38%)
35. #47 - the last straw (38%)
36. #25 - burn a hole in your pocket (38%)
37. # 1 - put his foot in his mouth (38%)
38. # 5 - throw in the towel (33%)
39. #36 - a chip on his shoulder (33%)
40. #44 - get it off his chest (33%)
41. #45 - by the skin of his teeth (29%)
42. #30 - on the house (29%)
43. # 2 - went in one ear and out the other (29%)
44. # 7 - a chip off the old block (29%)
45. #13 - on the tip of my tongue (29%)
46. #39 - bury the hatchet (24%)
47. # 8 - beat around the bush (19%)
48. #37 - straight from the horse's mouth (14%)
49. #12 - read between the lines (14%)
50. #49 - behind his back (10%)

responses. The best known idioms on the test were "to be in hot water" and "someone's name is mud," both with 100% correct responses. "Raining cats and dogs" and "to be on the ball" were also frequently identified, receiving correct responses from 95% of the subjects tested. The least frequently known idioms were "to say or do something behind someone's back" with only 10% correct answers, and "straight from the horse's mouth" and "to read between the lines" with only 14% each.

Summary

Twenty-one deaf students' idiom test scores were grouped according to certain variables investigated in this study. Their raw and mean scores were compared. Chi square analysis was applied to the data to determine the relationship between the comprehension of idioms and each of the four variables. Only one variable, reading level of the student, was found to be significant at the .05 level of significance. The test responses were also analyzed to determine the following: percentage of correct responses on the five most important idioms, and the ranking of idioms from most to least frequently known.

CHAPTER V

SUMMARY, DISCUSSION, AND RECOMMENDATIONS

This chapter is divided into three sections. The Summary provides an overview of the study and summarizes the data that were reported in Chapter IV. The Discussion relates the findings to the previous literature about hearing impairment and the comprehension of idiomatic expressions. The Recommendations are made concerning instruction and further research.

Summary

The problem of the study was to investigate the relationship between hearing impairment and the comprehension of idiomatic expressions by junior high age deaf students. An idiom test constructed by the researcher was used to determine the relationships. The variables were identified as follows: sex, grade level, degree of hearing loss, and reading level. Several hypotheses and research questions were formulated and limitations and assumptions were made concerning the study.

A study of the previous literature revealed that deaf children are extremely deficient in reading achievement. There are many conflicting reports as to the causes

of their deficiencies. Many researchers agree that abstract and figurative language contribute to the deaf child's reading difficulty. However, there is little information available on the relationship between hearing impairment and the comprehension of idioms, specifically.

The study was conducted among 21 students who comprised the entire population of junior high deaf students of a large suburban school district. Of the 21 students, eleven were males and ten were females. The subjects were in the seventh, eighth, and ninth grades and ranged in hearing loss from "moderately severe" to "profound." The reading levels of these students ranged from 2.3 to 9.8 on the Stanford Achievement Test: Reading Comprehension.

An idiom test was developed by the researcher to provide diagnostic information about deaf students' understanding of idioms. An elaborate screening process produced a list of fifty common idioms for use on the test. Each of the fifty idioms was placed, underlined, in a sentence and followed by four options, one of which could be substituted for the usual meaning of the idiom.

The researcher administered the idiom test to two to six students each period throughout a regular school day. The testing took place in a small classroom environment and was not timed. The researcher tabulated the scores at the end of the testing day.

The scores were analyzed in relation to sex of the student, grade level, degree of hearing loss, and reading level. Summary statistics calculated included raw scores, mean scores, median scores, and standard deviations. The test responses were examined to determine which idioms were the most and least frequently known by the deaf students.

Findings of the Study

The chi square procedure was chosen as the statistical technique for determining the relationships between the comprehension of idioms and the following four variables: sex of the student, degree of hearing loss, grade level, and reading level. The null hypotheses were tested at the .05 level of significance.

Sex of the Student. The first hypothesis stated that there will be no significant relationship between sex and the deaf students' comprehension of idioms. The chi square value of 2.658 was not statistically significant at the .05 level. Although the relationship was not statistically significant, the two highest scores made on the idiom test were scored by males and the male mean score ($\overline{X}$ = 30) was higher than the female mean score (X = 27). Also, six of the seven highest scores were made by males. While it appears that sex differences do not significantly

relate to the deaf students' comprehension of idioms, the male subjects in the study seem to have a better understanding of idioms. Hypothesis 1 is accepted.

Grade Level. The second hypothesis stated that there will be no significant relationship between grade level and the deaf students' comprehension of idioms. Although the data did not indicate a statistically significant relationship, the raw scores and summary statistics reveal that the scores and means on the idiom test increased as the grade level increased. The seventh graders made low to medium scores ($\bar{X}$ = 25), eighth graders scored low to high ($\bar{X}$ = 28), and ninth graders scored medium to high ($\bar{X}$ = 32) on the idiom test. However, since the chi square value of 4.768 did not indicate a statistically significant relationship at the .05 level, Hypothesis 2 is accepted.

Degree of Hearing Loss. Hypothesis 3 stated that there will be no significant relationship between degree of hearing loss and the deaf students' comprehension of idioms. The computed value of chi square was 8.361 with four degrees of freedom. The relationship was not statistically significant at the .05 level. The low number of subjects available for this study possibly influenced the data gathered for this variable more than for the other three variables. The population contained only two subjects with "moderately severe" hearing losses, only five

with "severe" hearing losses, and fourteen with "profound" hearing losses. The students with "severe" hearing losses had the highest scores and mean. Since the relationship was not found to be statistically significant, Hypothesis 3 is accepted.

Reading Level. The fourth hypothesis stated that there will be no significant relationship between reading levels and the deaf students' comprehension of idioms. The groups were nearly equal in size, with seven low readers, eight medium readers, and six high readers, as determined by their scores on the standardized reading achievement test. The computed chi square value of 12.077 was found to be statistically significant at the .05 level of probability. The mean score on the idiom test increased as reading level of the students increased. The mean scores were 24, 29, and 33 for the low, medium, and high readers, respectively. Based on these data, the relationship between reading level and the deaf students' comprehension of idioms is statistically significant and, therefore, Hypothesis 4 is not accepted.

Idiom Identification. The idioms determined by the deaf education teachers as being the five most important idioms for deaf students to understand were as follows: 1) "make ends meet;" 2) "pain in the neck;" 3) "turn over a new leaf;" 4) "stand on his own two feet;" and 5) "in

the doghouse." The most frequently known of these five idioms was found to be "turn over a new leaf" (86%), with the least frequently known being "pain in the neck" (52%). The second most frequently known of the five idioms was "stand on his own two feet" with 76% of the students answering it correctly, followed by "make ends meet" (71%) and "in the doghouse" (57%).

Two of the fifty idioms were answered correctly by all 21 subjects. These two idioms are "in hot water" and "someone's name is mud." The three idioms which were least frequently known by the subjects tested were "to do something behind someone's back" (10%); "to read between the lines" (14%); and "straight from the horse's mouth" (14%).

Discussion

Data collected from this study seem to indicate that variables such as sex, degree of hearing loss, and grade level have no statistically significant relationship with the deaf child's ability to understand idiomatic expressions. The results did, however, tend to suggest an increase in comprehension of idioms with an increase in grade level and, hence, age. The only variable that indicated a statistically significant relationship was the reading level of the student. The ability to recognize and understand idioms becomes greater as the student's reading level advances.

These findings are in agreement with Conley (1976), who found a very high relationship between idiom test scores and reading levels, but only minimal relationships between test scores and grade level.

These overall findings seem to support the research of Furth (1966), Odom, Blanton, and Nunnally (1967), and Edwards (1974), who reported that the deaf child with a low reading level simply does not know the language. The low reading level of the deaf does not constitute a reading deficiency but rather, linguistic incompetence, a lack of knowledge of the idiomatic and semantic use of words. Cooper and Rosenstein (1966) and Walter (1978) found that deaf children perform at a much lower vocabulary level than their hearing peers. In addition, three studies (Balow, Fulton, & Peploe, 1971; Turner, 1976; Fusaro & Slike, 1979) emphasized the importance of concreteness in the language and reasoning of hearing impaired students and their inability to accomplish the interpretive-inferential reading which idioms require.

If there were a statistically significant relationship between degree of hearing loss and comprehension of idioms, as several researchers (Evans, 1969; Conrad, 1977; Trybus & Karchmer, 1977) have reported, but that relationship was not indicated by the research conducted during the current study, certain factors may have interfered.

The idioms selected for the test may not be representative of those frequently used in oral communication, and with which students with only "moderately severe" hearing losses might be familiar. Another reason that this relationship might not have been detected was that the population involved was too small. Only two students with "moderately severe" hearing losses and five with "severe" hearing losses were available. A larger population would perhaps give additional data which would lead the researcher to either accept or reject the given hypotheses.

Recommendations for Further Research

Analysis of the data has resulted in the following recommendations:

1. Further research needs to be undertaken to include an additional administration of the current idiom test. Two administrations of the test, spaced far enough apart to control for short-term memory, may produce a more accurate indication of the deaf students' comprehension of idioms.
2. Further research needs to be undertaken with the current idiom test using a larger population from other school districts and from other grade levels. The larger population will allow for a more complete sampling of idiom comprehension among deaf

students. In being confined to one area and grade group, the schemata for and knowledge of idioms may tend to be similar.

3. Further research needs to be undertaken with another idiom test consisting of other idioms, and other test formats than multiple choice, using a larger population from other school districts and from other grade levels.
4. Further research needs to be undertaken using samples taken over several years and comparisons made of the samples to study the developmental consideration in learning idioms.

Recommendations for Instruction

The data revealed that as many as two-fifths of the idioms were not recognized by half of the population. Since this study found a positive relationship between reading level and comprehension of idioms, instruction in idiomatic expressions may possibly increase reading processes and test scores for the deaf child. These results, along with past research indicating the prevalence of idioms in printed materials, tend to suggest the need for instruction in idiomatic language. Teachers interested in pursuing this area of instruction may utilize the following recommendations:

1. Teach students to see the literal and figurative comparisons the writer wants them to see through his use of idiomatic expressions.
2. Teach idiomatic expressions to students through the use of illustrations which are humorous or unusual, such as "I'm burned up," "he's a big wheel," "he flew off the handle," or "crack the window."
3. Teach students to become aware of the prevalent use of idioms by beginning a collection of those heard or seen in the media.
4. Classify idioms by topics, such as color ("in the pink," "feeling blue," "don't be yellow"), parts of the body ("get off my back," "all ears," "keep an eye on you," "sharp tongue"), animals ("sour puss," "chicken," "rat," "sounds fishy," "stool pigeon," "high horse"), and food ("bring home the bacon," "full of baloney," "in a pickle," "full of beans," "piece of cake").
5. Dramatize or pantomime interesting idioms, such as "you turn me on," "he cracks me up," "he's a chip off the old block," "he got the cold shoulder," or "he kicked the bucket."
6. Read many stories and discuss the idiomatic expressions used.

7. Provide reading materials rich in the use of idiomatic language. An increase in exposure to idioms and the richness of language may aid in advancing reading achievement and in providing enjoyment for hearing impaired students.

APPENDICES

APPENDIX A: APPROVAL LETTER FROM SCHOOL DISTRICT TO CONDUCT STUDY

Richardson Independent School District

March 18, 1982

Ms. Regina S. Burton
15540 El Estado #219-1
Dallas, Texas

Dear Ms. Burton:

Your request to conduct research in the Richardson Independent School District has been reviewed by the district's Research Advisory Committee and has been approved. This letter is written notification that you may begin the study as outlined in the proposal.

If you have questions, please call me at 238-8111, Ext. 330.

Your interest in the Richardson schools is appreciated. I look forward to reviewing the results of your study when it is completed.

Sincerely,

Linda Woodward

Linda Woodward
Director-Planning, Research and Evaluation

mm

400 S. Greenville Avenue Richardson, Texas 75081 214/238-8111

APPENDIX B: APPROVAL LETTER FROM SCHOOL PRINCIPAL TO CONDUCT STUDY

Richardson Independent School District

March 31, 1982

TO WHOM IT MAY CONCERN:

The purpose of this letter is to give approval for Regina Burton to do research on Deaf Education at TWU.

Thank you.

Sincerely,

Jeff Kane

Jeff Kane, Principal
Richardson North Junior High
1820 North Floyd
Richardson, TX 75080

400 S. Greenville Avenue Richardson, Texas 75081 214/238-8111

APPENDIX C: LETTER TO SUBJECTS' PARENTS

Richardson North Junior High
Richardson, TX 75080
March 30, 1982

Dear Parents,

I am currently enrolled as a graduate student at Texas Woman's University in the field of reading. As part of my master's thesis, I am conducting a study on the relationships between hearing impairment and the comprehension of idiomatic expressions in reading. Therefore, I am asking your permission to test your child on this particular aspect of reading comprehension. The results could be very helpful in developing future reading instruction for the deaf. The RISD Research Advisory Committee has already reviewed and approved this study.

The students will be tested on Wednesday, March 31, during a portion of their study hall period. The test consists of 50 idioms used in sentences, with the student choosing one of four choices for the correct meaning of the idiom.

No child will be identified by name in the results, nor will any individual's contribution be released or used in any way except for the purposes of research. If you prefer that your child not participate in this study, please sign your name and your child's name to this letter and have him/her return it to me tomorrow. If you have any questions about the study you may call me at North, 235-4593. Please consider that I need every child's participation in order to make my efforts successful. Thank you for your cooperation.

Sincerely,

Regina S. Burton

Regina S. Burton,
Language Arts & Reading Teacher

APPENDIX D: LETTER TO DEAF EDUCATION TEACHERS

To: Deaf Education Teachers/Interpreters

From: Regina Burton, Reading & Language Arts Teacher

For my master's thesis, I am constructing an idiom test to evaluate the deaf student's interpretation of idioms and to investigate how this relates to their reading ability. I would appreciate your help in this stage of the test construction. Of the following 100 idioms, please circle the number of the 25 idioms which you feel are most crucial for the deaf student to understand in his everyday, real life reading. Then, of those 25, which 5 would you say are the most important and why?

Thank you for your time and effort. It is greatly appreciated. Please return this form to me or my box by Friday, Dec. 18. Thanks again!

1. to put one's foot in one's mouth
2. to have ants in one's pants
3. to go in one ear and out the other
4. to put the cart before the horse
5. to lead a dog's life
6. to make a mountain out of a molehill
7. to kick the bucket
8. to skate on thin ice
9. to set one's teeth on edge
10. to throw in the towel
11. to let the cat out of the bag
12. to be a chip off the old block
13. to be all ears
14. to bark up the wrong tree
15. to beat around the bush
16. to egg someone on
17. to be on pins and needles
18. to take the cake
19. to make ends meet
20. to kill 2 birds with one stone
21. to pull the wool over one's eyes
22. to rain cats and dogs
23. to read between the lines
24. to be on the tip of one's tongue
25. to hit the hay
26. to be the apple of one's eye
27. to be down in the dumps
28. to be in hot water
29. to jump on the bandwagon
30. to be a pain in the neck
31. to take the bull by the horns
32. to turn over a new leaf
33. to spill the beans
34. to make one's blood boil
35. to be on the ball
36. to pull one's leg
37. to bring home the bacon
38. to burn the candle at both ends
39. to smell a rat
40. to eat your heart out
41. to get under one's skin
42. to fly off the handle
43. to hit the nail on the head
44. to burn a hole in one's pocket
45. to be in the same boat
46. to put a bug in one's ear
47. to be a sight for sore eyes
48. to sow one's wild oats
49. to be a slip of the tongue
50. to be left out in the cold

51. someone's name is mud
52. to pull strings
53. to see the light
54. to stand on one's own 2 feet
55. to be on the house
56. to be out of the clear blue sky
57. to play second fiddle
58. to be head over heels
59. to be all thumbs
60. to paint the town red
61. to play by ear
62. to take someone for a ride
63. to be on one's toes
64. to get up on the wrong side of bed
65. the cat's got one's tongue
66. by the skin of one's teeth
67. to be in the bag
68. to have butterflies in one's stomach
69. to beat one's brains out
70. to be a fish out of water
71. to break the ice
72. to beat one's head against the wall
73. to cook one's goose
74. to climb the wall
75. to eat one's words
76. to have a chip on one's shoulder
77. to have cold feet
78. to be on one's last leg
79. straight from the horse's mouth
80. to lose one's head
81. to put all one's eggs in basket
82. to be at loose ends
83. to give a piece of one's mind
84. to save for a rainy day
85. to bury the hatchet
86. to butter someone up
87. to give someone a cold shoulder
88. to know by heart
89. to hold one's tongue
90. to be under the weather
91. to get something off one's chest
92. one's bark is worse than bite
93. to be at wit's end
94. to do at the drop of a hat
95. to go through thick and thin
96. the last straw
97. to take someone to the cleaners
98. to be in the doghouse
99. to say behind one's back
100. to break one's heart

Which five of your twenty-five do you feel are the most important idioms for the deaf student to understand? Why these five, in particular?

APPENDIX E: PILOT TEST

PILOT TEST

DIRECTIONS: CHOOSE THE ANSWER WHICH MEANS THE SAME, OR ABOUT THE SAME, AS THE UNDERLINED PHRASE.

1. He put his foot in his mouth with his joke about that church, not knowing that one of his guests belonged to it.

   a) hurt someone's feelings c) giggled
   b) laughed aloud d) hurt his foot

2. The teacher's directions to the boy went in one ear and out the other.

   a) had to be repeated c) were ignored by the boy
   b) were not loud enough d) were heard by the whole class

3. You're not badly hurt, Johnny. Stop trying to make a mountain out of a molehill.

   a) play in the sand c) make something small seem big
   b) climb tall mountains d) play too roughly

4. Old Mr. Jones kicked the bucket just two days before his 94th birthday.

   a) had a birthday party c) hurt his foot
   b) died d) spilled his milk bucket

5. After taking a beating for five rounds, the fighter decided to throw in the towel.

   a) wipe his face with a towel c) throw a towel at the fighter
   b) fight back harder d) give up and admit defeat

6. We wanted to surprise Mary with a birthday party, but Allen let the cat out of the bag.

   a) told her the secret c) did not want to go
   b) gave her a cat as a gift d) let his cat go to the party

7. From both his looks and his acts, you could see that he was a chip off the old block.

   a) alot like his father c) from a foreign country
   b) a very nice person d) quite angry

8. He beat around the bush for half an hour before finally answering the question.

a) walked around the garden
b) remained silent
c) talked about other things
d) beat his drums

9. Both husband and wife had towork to make ends meet.

a) make their clothing
b) find happiness
c) get to the track meet on time
d) have enough money to pay the bills

10. Trying to make him change his mind is just beating your head against a wall.

a) asking for a headache
b) a very simple task
c) useless
d) fun to watch

11. In the middle of the picnic, it started to rain cats and dogs.

a) being overrun by ants
b) to get quite noisy
c) being overrun by cats and dogs
d) raining very hard

12. Some kinds of poetry make you read between the lines.

a) read the small print
b) skip lines as you read
c) guess at the writer's meaning
d) read every other line

13. His name is on the tip of my tongue.

a) written on my tongue
b) the same as mine
c) unknown to me
d) about to be remembered

14. The boys were down in the dumps when they heard that their team had lost.

a) playing at the dump
b) sad
c) in the bad part of town
d) sitting down

15. John's cruel remarks got him into alot of hot water.

a) trouble
b) hot tubs
c) hot showers
d) bad jokes

16. Billy Smith is a regular pain in the neck.

a) patient in the hospital
b) bothersome person
c) very sick person
d) customer at the tie shop

17. George turned over a new leaf and stopped disturbing the class.

a) started a leaf collection
b) sprouted a new leaf
c) made a sudden change for better
d) painted a new leaf

18. John's friends were going to surprise him with a gift, but Tom spilled the beans.

a) bought him jelly beans
b) did not want to
c) told John about it
d) destroyed the gift

19. Ben is really on the ball in school.

a) doing well
b) failing
c) a good athlete
d) the best quarterback

20. At first I actually believed that his wife was a princess. Then I realized that he was pulling my leg.

a) really a prince
b) fooling me
c) a shoe salesman
d) telling the truth

21. Joe knows many songs well and can play the piano by ear.

a) without reading music
b) with his ear
c) and sing at the same time
d) only by reading music

22. He worked hard every day and went to parties every night; he was burning the candle at both ends.

a) running out of candles
b) conserving candles
c) doing too much without rest
d) not enjoying himself

23. John flew off the handle whenever Mary made a mistake.

a) was always quite patient
b) became very angry
c) was very forgiving
d) always corrected her

24. When the salesman wanted money for goods he hadn't delivered, I told him not to put the cart before the horse.

a) add the sales tax
b) deliver the goods
c) sell the horse and cart
d) do things in the wrong order

25. Money burns a hole in Linda's pocket.

a) gets hot in her pocket
b) makes her pocket bulge
c) makes her want to buy something
d) falls through holes in her pocket

26. All the other children had parts in the play, but Johnny was left out in the cold.

a) made the director
b) sent home
c) not included
d) put outside in the cold

27. If your mother finds out I spilled ink on her rug, my name will be mud.

a) I will blame you
b) I will be in trouble
c) I'll be called a bad name
d) she will think it is mud

28. If you want to see the Governor, Mr. Jones can pull some strings for you.

a) use his power to arrange it
b) call the Governor
c) open the curtains
d) make an appointment

29. After his father died, John had to stand on his own two feet.

a) stand up straight
b) earn his own living
c) buy new shoes
d) wear his father's shoes

30. Oscar was the first customer at the restaurant, so his lunch was on the house.

a) paid for by the owner
b) served outside
c) served very early
d) cooked on the grill

31. No one would have known our plans if Kay hadn't made a slip of the tongue.

a) changed them
b) stuck her tongue out
c) made the mistake of telling them
d) slipped out of the room

32. The successful ball player is always on his toes.

a) practicing his ballet
b) hopping on his toes
c) alert and ready to play
d) tiptoeing

33. Henry <u>got up on the wrong side of the bed</u> this morning and wouldn't eat his breakfast.

a) woke up sick
b) fell out of bed
c) slept late
d) woke up in a bad mood

34. When Bob walked into the office to ask for a job, he <u>had butterflies in his stomach</u>.

a) was sick to his stomach
b) had a stomach disease
c) was nervous
d) saw butterflies in the room

35. John called Harry a coward, but he had to <u>eat his words</u> after Harry bravely fought a big bully.

a) take back what he said
b) eat his lunch
c) talk to Harry
d) run away frightened

36. Charles often gets into fights because he goes around with <u>a chip on his shoulder</u>.

a) a readiness to be angered
b) a battery on his shoulder
c) a violent gang
d) a pretty girl

37. Mary is going to get married. I heard the news <u>straight from the horse's mouth</u>.

a) just recently
b) from a friend of mine
c) from Mary herself
d) before anyone else

38. The officer <u>gave the soldier a piece of his mind</u> for not cleaning his boots.

a) laughed at the soldier
b) angrily scolded the soldier
c) punished the soldier
d) excused the soldier

39. The two men had been enemies a long time, but after the flood they <u>buried the hatchet</u>.

a) buried the dead
b) became neighbors
c) cleaned up the town
d) ended their quarrel

40. He began to <u>butter up</u> the boss in hope of being given a raise in salary.

a) flatter and compliment
b) insult
c) buy butter for
d) put butter on

41. When Bob asked Alice for a date she <u>gave him the cold shoulder</u>.

a) accepted it calmly
b) screamed with delight
c) hesitated before answering
d) turned away and didn't answer

42. The students learned many poems <u>by heart</u>.

a) because they had to
b) by Valentine's Day
c) because they wanted to
d) by memory

43. Ann missed school because she was <u>under the weather</u>.

a) caught in the rain
b) snowed in
c) fixing a leaky roof
d) ill

44. After Dave told the principal that he had cheated on the test, he was glad because he <u>got it off his chest</u>.

a) made a good grade on it
b) would not be punished
c) no longer felt worried about it
d) did not tell the teacher

45. John passed English <u>by the skin of his teeth</u>.

a) just barely
b) with an A+
c) but failed his other courses
d) with braces on his teeth

46. The friends were faithful <u>through thick and thin</u>.

a) in good weather and bad
b) in good and bad times
c) ice skaters
d) football fans

47. Bill had a bad day in school yesterday. He lost his knife, then he fell down, and when he broke a shoe lace, that was <u>the last straw</u> and he began to cry.

a) his last shoe lace
b) the last thing to happen
c) just too much to bear
d) the last straw in the cafeteria

48. Jerry is <u>in the doghouse</u> because he dropped the football and the other team won the game.

a) watching the dogs
b) feeding the dogs
c) angry with himself
d) in trouble with his team

49. It is not right to criticize a person <u>behind his back</u>.

a) loudly
b) to his face
c) without his knowledge
d) without good reason

50. When Mr. White lost everything he had worked so hard for, it <u>broke his heart</u>.

a) made him give up
b) made him very sad
c) caused him to have a heart attack
d) made him try even harder

PILOT TEST KEY

1.	a	25.	c	49.	c
2.	c	26.	c	50.	b
3.	c	27.	b		
4.	b	28.	a		
5.	d	29.	b		
6.	a	30.	a		
7.	a	31.	c		
8.	c	32.	c		
9.	d	33.	d		
10.	c	34.	c		
11.	d	35.	a		
12.	c	36.	a		
13.	d	37.	c		
14.	b	38.	b		
15.	a	39.	d		
16.	b	40.	a		
17.	c	41.	d		
18.	c	42.	d		
19.	a	43.	d		
20.	b	44.	c		
21.	a	45.	a		
22.	c	46.	b		
23.	b	47.	c		
24.	d	48.	d		

APPENDIX F: IDIOM TEST

IDIOM TEST

DIRECTIONS: CHOOSE THE ANSWER WHICH MEANS THE SAME, OR ABOUT THE SAME, AS THE UNDERLINED PHRASE.

1. He put his foot in his mouth with his joke about that church, not knowing that one of his guests belonged to it.
   a) hurt someone's feelings
   b) laughed aloud
   c) giggled
   d) hurt his foot

2. The teacher's directions to the boy went in one ear and out the other.
   a) were repeated
   b) were not loud enough
   c) were ignored by him
   d) were heard by all

3. You're not badly hurt, Johnny. Stop trying to make a mountain out of a molehill.
   a) play in the sand
   b) climb tall mountains
   c) make it seem big
   d) play too roughly

4. Old Mr. Jones kicked the bucket just two days before his 95th birthday.
   a) had a birthday party
   b) died
   c) hurt his foot
   d) spilled his milk

5. After taking a beating for five rounds, the fighter decided to throw in the towel.
   a) wipe his face with a towel
   b) throw a towel at the fighter
   c) fight back harder
   d) give up & admit defeat

6. We wanted to surprise Mary with a birthday party, but Allen let the cat out of the bag.
   a) told her the secret
   b) took his cat to the party
   c) did not want to go
   d) gave her a cat

7. From both his looks and his acts, you could see that he was a chip off the old block.
   a) alot like his father
   b) alot like his friend, Chip
   c) from a foreign country
   d) a very nice person

8. He beat around the bush for half an hour before finally answering the question.

a) walked around the garden
b) remained silent
c) talked about other things
d) beat his drums

9. Both husband and wife had to work to make ends meet.

a) make their clothing
b) find happiness
c) get to the track meet
d) make enough money

10. Trying to make him change his mind is just beating your head against a wall.

a) asking for a headache
b) trying something uselessly
c) trying to be funny
d) beating him up

11. In the middle of the picnic, it started to rain cats and dogs.

a) to be overrun by ants
b) to get quite noisy
c) to be ruined by pets
d) to rain very hard

12. Some kinds of poetry make you read between the lines.

a) read the small print
b) skip lines as you read
c) guess at the meaning
d) read every other line

13. His name is on the tip of my tongue.

a) about to be on my tongue
b) about the same as mine
c) about to be changed
d) about to be remembered

14. The boys were down in the dumps when they heard that their team had lost.

a) angry
b) sad
c) happy
d) mean

15. John's cruel remarks got him into alot of hot water.

a) trouble
b) hot tubs
c) hot showers
d) bad jokes

16. Billy Smith is a regular pain in the neck.

a) patient in the hospital
b) bothersome person
c) very sick person
d) customer at the tie store

17. George turned over a new leaf and stopped disturbing the class.

a) started a leaf collection
b) made a sudden change for better
c) sprouted a new leaf
d) painted a new leaf

18. John's friends were going to surprise him with a gift, but Tom spilled the beans.

a) bought him jelly beans
b) did not want to
c) told John about it
d) destroyed the gift

19. Ben is really on the ball in school.

a) doing well
b) becoming a good quarterback
c) being a good athlete
d) failing

20. At first I actually believed that his wife was a princess. Then I realized that he was pulling my leg.

a) pulling my shoe off
b) joking me
c) telling the truth
d) playing a game

21. Joe knows many songs well and can play the piano by ear.

a) without reading music
b) with his ear
c) only with music
d) with a band

22. He worked hard every day and went to parties every night; he was burning the candle at both ends.

a) running out of candles
b) doing too much without rest
c) conserving candles
d) not enjoying himself

23. John flew off the handle whenever Mary made a mistake.

a) was always quite patient
b) became very angry
c) was very forgiving
d) always corrected her

24. When the salesman wanted money for goods he hadn't delivered, I told him not to put the cart before the horse.

a) add the sales tax
b) deliver the goods
c) sell the horse & cart
d) do things in the wrong order

25. Money burns a hole in Linda's pocket.

a) makes her want to buy things
b) falls through her pockets
c) gets hot in her pocket
d) makes her pocket big

26. All the other children had parts in the play, but Johnny was <u>left out in the cold</u>.

a) made the director
b) sent home
c) not included
d) put out in the cold

27. If your mother finds out I spilled ink on her rug, <u>my name will be mud</u>.

a) I'll be called a bad name
b) she will think it is mud
c) I will blame you
d) I will be in trouble

28. If you want to see the Governor, Mr. Jones can <u>pull some strings</u> for you.

a) use his power to arrange it
b) call the Governor
c) open the curtains
d) make an appointment

29. After his father died, John had to <u>stand on his own two feet</u>.

a) stand up straight
b) earn his own living
c) buy new shoes
d) wear his father's shoes

30. Oscar was the first customer at the restaurant, so his lunch was <u>on the house</u>.

a) paid for by the owner
b) served outside
c) served very early
d) cooked on the grill

31. No one would have known our plans if Kay hadn't <u>made a slip of the tongue</u>.

a) changed them
b) stuck her tongue out
c) slipped out of the room
d) made the mistake of telling them

32. The successful ball player is always <u>on his toes</u>.

a) practicing his ballet
b) alert & ready to play
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a) woke up sick
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c) slept late
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34. When Bob walked into the office to ask for a job, he <u>had butterflies in his stomach</u>.

a) was sick to his stomach
b) had a stomach disease
c) was nervous
d) saw butterflies

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a) take back what he said
b) eat his lunch
c) talk to Harry
d) run away frightened

36. Charles often gets into fights because he goes around with a chip on his shoulder.

a) a readiness to be angered
b) a battery on his shoulder
c) a violent gang
d) a pretty girl

37. Mary is going to get married. I heard the news straight from the horse's mouth.

a) from a horse
b) from a friend of mine
c) from Mary herself
d) from Mary's boyfriend

38. The officer gave the soldier a piece of his mind for not cleaning his boots.

a) some boot polish
b) a scolding
c) a black eye
d) a good excuse

39. The two men had been enemies a long time, but after the flood they buried the hatchet.

a) buried the dead
b) became neighbors
c) cleaned the town
d) ended their quarrel

40. He began to butter up the boss in hope of being given a raise in salary.

a) flatter & compliment
b) insult
c) buy butter for
d) put butter on

41. When Bob asked Alice for a date she gave him the cold shoulder.

a) accepted it nicely
b) screamed with delight
c) hesitated before replying
d) turned away & didn't answer

42. The students learned many poems by heart.

a) by demand
b) by Valentine's Day
c) by love poets
d) by memory

43. Ann missed school because she was under the weather.

a) caught in the rain
b) snowed in
c) fixing a leaky roof
d) ill

44. After Dave told the principal that he had cheated on the test, he was glad because he got it off his chest.

a) was no longer worried by it
b) made a good grade on it
c) would not be punished
d) didn't tell the teacher

45. John passed English by the skin of his teeth.

a) with a D-
b) with an A+
c) with his best friend
d) with braces on his teeth

46. The friends were faithful through thick and thin.

a) in good weather and bad
b) in good and bad times
c) in ice skating
d) at football games

47. Bill had a bad day in school. He lost his knife, then he fell down, and when he broke his shoe lace, that was the last straw and he began to cry.

a) his last shoe lace
b) the last thing to happen
c) just too much to bear
d) the last straw in the cafeteria

48. Jerry is in the doghouse because he dropped the football and the other team won the game.

a) watching the dogs
b) feeding the dogs
c) punishing himself
d) being punished by his team

49. It is not right to criticize a person behind his back.

a) with handicaps
b) with problems
c) without his knowledge
d) without good reason

50. When Mr. White lost everything he had worked so hard for, it broke his heart.

a) made him give up
b) caused him to have a heart attack
c) made him very sad
d) made him try even harder

IDIOM TEST KEY

1.	a	21.	a	41.	d
2.	c	22.	b	42.	d
3.	c	23.	b	43.	d
4.	b	24.	d	44.	a
5.	d	25.	a	45.	a
6.	a	26.	c	46.	b
7.	a	27.	d	47.	c
8.	c	28.	a	48.	d
9.	d	29.	b	49.	c
10.	b	30.	a	50.	c
11.	d	31.	d		
12.	c	32.	b		
13.	d	33.	d		
14.	b	34.	c		
15.	a	35.	a		
16.	b	36.	a		
17.	b	37.	c		
18.	c	38.	b		
19.	a	39.	d		
20.	b	40.	a		

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