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A STUDY OF SPELLING PROGRAMS IN THE INTERMEDIATE CLASSES FOR THE EDUCABLE MENTALLY RETARDED IN THE GRANITE AND SALT LAKE CITY

SCHOOL DISTRICTS

by

LaDawn L. Keith

A seminar report submitted in partial fulfillment of the requirements for the degree

of

MASTER OF EDUCATION

in

Special Education

UTAH STATE UNIVERSITY Logan, Utah

TABLE OF CONTENTS

INTRO	DUC	TION														Page
	State	ement o	of pr	obl	em											3
	Defi	nitions						•						,		4
	Lim	itations	3										٠			5
REVIE	EW OF	LITE	RAT	'UR	E											7
		ctives mental					of e	educ	ati •	on i	for	the •		,		7
	The	curric	ılun	n for	r th	ne e	duc	abl	e m	ent	ally	re	taro	ded		9
	Spel	ling obj educab					70	-		rric	ulu •	m f	or t	he.		11
		ction of mental			0		ds f	or	the	edu		ole •				15
		ommeno classes				0										20
RESUI	LTS						٠									22
	Sumi	mary o	f re	sult	s											25
SUMM	ARY,	CONC	LUS	ION	S A	NI	RI	ECC	MN	1EN	IDA	TIC	NS	•		27
	Sumi	mary a	nd c	onc	lus	ion	s									27
	Reco	mmen	datio	ons												28
BIBLIC	OGRA	PHY					٠					٠	,		٠	30
APPE	NDIXE	ES .					(*)									33
	Appe	ndix A	. 0	ues	tion	nna	ire									34

Appendix B.	Spelling Words								
	Fitzgerald's List B: 450 Very Useful Spelling Words	36							
Appendix C.	Fitzgerald's List A and selected words from List B grouped according to their linguistic pattern and difficulty	40							
Appendix D.	Index of publisher of reading and spelling programs cited	44							
Appendix E.	Table I - Results of Questionnaires	45							

INTRODUCTION

The curriculum for the educable mentally retarded is based on persisting life problems and one of these, as identified by the Cincinnati Public Schools (1964), is learning to communicate ideas.

To be able to communicate effectively your ideas in written form, it is necessary to know how to spell.

In order to operate effectively within a school and community, the slow learner will need to complete his development of communicative skills by learning to write and spell. While it is true that his needs for written expression are considerably less than they are for oral communication, he will, nevertheless, need to acquire some skill in writing and spelling in order to meet daily situations. He will need these skills to write letters, record messages, compile shopping lists, and complete applications and forms. Writing and spelling skills are closely tied to the development of all other communication skills. For the learner, writing and spelling are not ends in themselves, but merely tools for communication and self-expression. The purpose of teaching writing and spelling in the program for the slow learner is to provide him with an easy, effective way he can communicate. This can be accomplished by developing his ability to write legibly and to spell correctly in meeting ordinary demands of living. (Cincinnati Public Schools, 1964, p. 169)

Horn (1968) notes that spelling errors are distracting and take away from the effectiveness of any written work. They can also be embarrassing in personal as well as in business letters, and perhaps crucial in letters applying for work. Because of the advantages of good spelling ability, it is important for a spelling program to be carefully and systematically planned so the student will learn how to spell correctly. Spelling is a part of life. It is a skill which, if properly mastered, will facilitate written expression and make living more pleasant and adequate.

Fitzgerald (1951) points out the importance of choosing spelling words for the educable mentally retarded. The words chosen should be carefully evaluated. Some teachers have taught as spelling the words which are used by the children in unit studies. Although it is helpful for the student to be able to recognize these words in regards to meaning and use, he should not always be required to spell them.

These words will probably never be written again by many of the children. However, the words in the unit which are needed frequently in writing should be a part of the spelling curriculum.

According to Fitzgerald (1951, p. 13), "A slow learning child should master a small core of basic words rather than dissipate his energy by attempting to learn a large number of words, many of which he will never use."

Johnson further supports this theory:

Spelling instruction should deal with those words the child uses in his written material, such as answering questions in relation to other academic areas, writing letters, and so forth. These are the words the children use and will be using. These are the words they should know how to spell. Many words contained in any arbitrary list are not designed for any specific child

or group of children living in a particular environment and having unique needs. These lists will, consequently, contain many words of little or no value while omitting some of relatively common usage. It is known that a relatively small number of basic words (between two and three hundred) comprise approximately 50 per cent of all written communication. Every child should learn how to spell these words. Beyond this, much of spelling instruction becomes a problem of determining individual need. (Johnson, 1963, p. 218)

The writer through past observations of classes for the intermediate educable mentally retarded and through past experiences in teaching these classes has noted that there seems to be no consistent rationale for determining the list of spelling words for these children. Some teachers use conventional textbooks, others use important unit study words, while some use survival or environmental words, or a combination of the above, to constitute the spelling program.

Since the purpose of this study was to gain information about the spelling programs in the intermediate classes for the educable mentally retarded, the writer sent a questionnaire to the teachers of these classes. The data received was charted in order to show the various approaches to spelling being used by these teachers.

Statement of problem

Because of the various means teachers have in choosing their spelling words, the writer is concerned about investigating the present spelling programs for the intermediate classes for the educable mentally retarded.

The specific purposes of this study were:

- To determine through the use of a questionnaire sent to teachers of intermediate classes for the educable mentally retarded in the Granite and Salt Lake City school districts what kinds of spelling programs are being conducted.
- To determine from the questionnaire how teachers select spelling words for their students.
- 3. To select from the literature a list of the most essential spelling words, group these words according to their linguistic pattern (phonetic families) where possible, and list them according to difficulty.

Definitions

- Functional spelling vocabulary words used in highest frequency in written vocabulary now and in adult life.
- Spelling a systematic method of learning how to spell words.
- Formal spelling program any spelling program which occupies a specific alloted time each day in the total curriculum.
- 4. Educable mentally retarded (EMR) the educable mentally retarded are generally classified in the intelligence quotient range of approximately 50 to 75. They usually attend a special class within the public school organization.

The terms "slow learner" and "intellectually handicapped" refer to the above definition and will be used interchangeably in the paper.

5. Intermediate educable mentally retarded - children who would normally be in the fourth, fifth, or sixth grade. Their age would range from nine to twelve years and their mental age would be approximately from six and one half to eight.

Limitations

- Research will be confined to the intermediate classes for the educable mentally retarded in the Granite and Salt Lake City school districts.
- Questionnaires (Appendix A) will be sent only to teachers of intermediate classes for the educable mentally retarded in the Granite and Salt Lake City school districts.

The questionnaire consists of questions derived from specialists in the field of spelling and mental retardation. Carmody (1952),

Fitzgerald (1951) and Ingram (1960) advocate the use of a specified time each week based upon a grade level spelling text. The first three questions reflect the experts' concern.

Curriculum guides for the educable mentally retarded (Cincinnati Public Schools, 1964; Denver Public Schools, 1961; Duval County Schools, 1966 and Illinois State Department of Public Instruction, 1958) usually contain specific suggestions for a spelling program based upon the needs of the students who are educable mentally retarded. Questions four to six reflect these concerns of specialists in the field of spelling.

Questions seven and eight were designed to allow the teacher an opportunity to be more specific regarding her spelling program.

Because this study was conducted during the summer, the writer realizes that the responses were limited. However, the writer feels assured there was enough of a response to gain valuable information about the problem.

REVIEW OF LITERATURE

Objectives and purposes of education for the mentally retarded

The Educational Policies Commission report (NEA, 1938) stated four groups of objectives for American education which are widely accepted. They are as follows:

- I. The Objectives of Self-Realization
- II. The Objectives of Human Relationship
- III. The Objectives of Economic Efficiency
- IV. The Objectives of Civic Responsibility

These objectives, in general, are applicable to the mentally handicapped child.

In contrast to goals and objectives of the more quantitative type, those that suggest primarily qualities of behavior or traits, attitudes, and dispositions that all the members of a democratic community must possess in some degree should be the same for all children, regardless of ability. Any good formulation of such goals, such as the one by the Educational Policies Commission of the National Education Association, entitled The Purposes of Education in American Democracy, can be used by teachers of slow learners as a guide quite as readily and as validly as by teachers of other pupils. It is not an easy matter, of course, to state precisely what degree or standard of behavior one may expect at any given age, or to find out whether pupils are actually growing in the direction of these qualitative goals, but the task is no more difficult for teachers of slow-learning pupils than it is for others. Nevertheless, it will be helpful to point out some of the special interpretations of objectives a teacher of slow learners will need to follow with repsect to the major types of "competences" the curriculum should cultivate. (Featherstone, 1951, p. 36)

The outstanding objectives to be sought in educating the mentally retarded as listed by Ingram (1960, p. 97) are:

- 1. Mental and physical health
- 2. A practical working knowledge of the tool subjects
- 3. Worthy home and community life
- 4. Worthy use of leisure time
- 5. Adjustment in occupations

The following authorities in the field of mental retardation,

Garton (1964), Ingram (1960), Kirk and Johnson (1951) and Kolburne
(1965), all have stated that the main purpose of education is to help
prepare the child to meet sufficiently the needs required in daily
living. The objectives for the retarded differ from those for the
average child only to the extent that they are narrower in scope.

They are narrowed down to prepare him to fulfill specific adjustments
in a limited occupational and social sphere. In order for such an aim
to be realized for the slow-learning child, it is particularly important
for the curriculum to be adjusted to meet his daily needs. It is
necessary that the application of all his learnings to simple life
situations be made clear and that all practice tends to promote functional
learnings. Or as Kolburne (1965, p. 157) states, "The more functional
the application, the greater will be their understanding and ability; the
probability of their achieving success in life will be enhanced."

The curriculum for the educable mentally retarded

The Illinois State Department of Public Instruction (1958) points out that children with intellectual disabilities require a special curriculum with the objectives stated in terms of persisting problems of daily living. They specified ten functions which persist throughout the life of an individual in a democracy. These were listed as functions in:

Citizenship
Communicating
Home and Family
Leisure Time
Management of Materials and Money
Occupational Adequacy
Physical and Mental Health
Safety
Social Adjustment
Travel

The Life Functions lend themselves to a further breakdown within an educational frame of reference. Identifiable within each Life Function are the behaviors and skills necessary to their performance. These behaviors and skills can be viewed as proficiencies in subject matter to be acquired in a developmental progression ranging from the comparatively simple and concrete at an early age to the quite complex and abstract at maturity. (Illinois State Department of Public Instruction, 1958, p. 1)

The Duval Board of Public Instruction, Jacksonville, Florida, (1966) perceives the curriculum as a vehicle. Ideally, this vehicle should take the intellectually handicapped child from where he is developmentally when he enters the daily life of the school community to where he needs to be when he merges with the daily life of the

adult community.

The essence of a curriculum (Cincinnati Public Schools, 1964) for these children is the promotion of their proficiency in the functional skills.

The curricular construct selected should:

- 1. emphasize the slow learning child's nature and needs.
- take account of the demands society places upon each of its members as expressed in problems associated with daily living.
- provide opportunity for scope and sequence for those skills, understandings, habits, and attitudes to be learned.
- 4. provide for the development of an instructional program which has purpose, meaning, and utility for children at each stage of their development.
- provide concrete help for teachers in identifying needs of children, setting instructional goals, and developing meaningful learning experience. (Cincinnati Public Schools, 1964, p. 7)

Similarly, Ingram (1960, p. 98) lists six criteria by which each educative experience should be measured. Does it promote

health, both mental and physical? a practical application of the tool subjects? better home membership? better group and community living? a better use of leisure time? desirable working habits and attitudes?

In view of the above, the writer concludes that adequacy in daily living is the desired outcome and purpose of the school program for the educable mentally retarded. To achieve this goal, the curriculum must be adjusted to meet his needs in order to provide school experiences which are meaningful and functional.

$\frac{Spelling\ objectives\ and\ spelling\ curriculum}{for\ the\ educable\ mentally\ retarded}$

The most commonly accepted single objective for the teaching of spelling is to enable pupils to spell the words they need to write now and in the future. It is clearly impossible for pupils to learn in school all the words which they may at some time have occasion to write. It has been well said that the English language has a well-designed center but no discernible circumference. It is the central words, that is, the words most often needed in writing, that pupils should learn to spell. (Horn, 1968, p. 3)

Fitzgerald (1951^b) believes children with little competence as well as those with great capability must be taught in accord with their needs and abilities. A spelling goal for the slow learning child would be to master a small core of basic words. It would be ridiculous for him to dissipate his energy by attempting to learn a large number of words, as many of these he would not ever be required to write outside of school.

Carmody (1952) is in agreement. She states that the goal for all children should be the mastery of a minimum basic list. However, recognition of differences in rates of development and abilities indicates the necessity of setting up differentiated goals. The slow children certainly will not be able to master as many words as the more accelerated children. Extremely slow learning children will probably do well to be able to spell the most essential 500 to 800 words at the completion of elementary school.

The Illinois State Department of Public Instruction (1958) indicates the need for the spelling vocabulary to be functional. The spelling words should be confined to those the child needs to know for everyday living situations. This list will consist of basic words needed by all and additional words selected on an individual basis according to interest and capacity. The child should be not required to learn to spell words that are not in his sight vocabulary, or words that he cannot comprehend or pronounce accurately. The number of words to be learned will be determined by the capacity and interest of the child.

The Seattle Public Schools (1958) describes the spelling program for the primary grades (this would be comparable to the spelling program for the intermediate EMR). The initial experiences in spelling are functional and are provided as the need arises throughout the day. There is also direct or formal teaching of spelling, where definite periods, each day, are devoted to teaching spelling.

Throughout all phases of the program, writing and spelling skills should be related to a purpose which the learner perceives as meaningful to him. The development of these skills should be functional. It should cut across all aspects of the school program and be an integral part of all learning activities. While a major portion of the development of writing and spelling should be of a functional nature, regular practice periods may be provided to help eradicate specific difficulties which individual pupils are having. (Cincinnati Public Schools, 1964, p. 171)

Ingram (1960) notes there is generally little carry-over of words memorized from the weekly spelling list to actual spelling situations. The real challenge of learning to spell comes from being able to spell the words needed to do one's work. Also it helps to know how often one can make use of the words he is learning to spell. Real needs for spelling will be realized in writing information and stories, listing games learned, formulating rules for conduct in certain situations, writing letters, directions, and so forth. A basic core of the most-frequently-used words should be supplemented by words the children require in their written work. The teacher should be on guard against teaching the unusual words that the child will need for only a particular activity.

Ammon (1969) states some facts about the predetermined class list. He thinks it is ridiculous for all children to learn to spell every word on such a list. Some he may already know how to spell; some may be too difficult and others will not have any personal or significant meaning. The best list of spelling words for a child contains words which are taken from the misspellings of his own writing. Words which Ammon thinks should be given to the class are words from subject areas which need to be learned and words that lend themselves to phonetic generalizations, as this helps the child gain independence in spelling. Also particularly troublesome words such as homonyms and those that are phonetically irregular may be added.

Similarly, Christine (1966), Ediger (1967), Hughes (1966) and Simjack (1967) question the use of the arbitrary spelling list.

Individual differences need to be considered. No child should have to learn to spell more words per week than his ability level would indicate. However, a good spelling program would definitely have as its purpose the goal of interesting pupils in words for their own sake.

Bingham (1969) says spelling to be functional must serve the individual in natural situations. He thinks spelling lists should be more meaningful to the children. This can be done by creating word lists which reflect individual needs as indicated by the writings of the children and vocabulary usage.

Kirk and Johnson (1951) also state that the mentally handicapped child should learn the spelling words he will be using in everyday life, or those that he will need in adult life. His spelling vocabulary should be confined to the vocabulary used by the child at his level of development.

The writer notes that all the readings have indicated the need for the spelling of the student to be functional. This can be accomplished when the occasions for writing in school resemble the occasions for writing outside of school. Through this means the learning of the most important words will be facilitated.

$\frac{\text{Selection of spelling words for the educable}}{\text{mentally retarded}}$

The Cincinnati Public Schools (1964) compares the spelling program for the intermediate educable mentally retarded child to the spelling program for the regular primary grades (first, second and third grade). He spells the words most commonly found on this level, plus the most common abbreviations.

The Denver Public Schools (1961) outlined a similar spelling program for the intermediate educable mentally retarded. He spells words most commonly used on the primary levels and also is taught the words on the Dolch 220 basic word list.

According to Horn (1968), there are two types of evidence of basic importance in selecting spelling words for the spelling curriculum: first, evidence on words most frequently written by adults; and second, the evidence on words written by children in the various grades of school.

It is essential to understand clearly the different functions served by the data on the writing needs of adults and the data on the writing needs of children. The data on the writing needs of adults show which words children should be able to spell when schooling is over. The data on the written vocabularies of children show which words are most often written by children in various grades. Especially significant are the data on the words most frequently written by children outside school. Their usefulness is not limited to the selection and gradation of words in spelling books; they are perhaps even more useful for schools which derive their own lists. (Horn, 1968, p. 5)

Fitzgerald (1951^b)notes that often spelling lists contain words which are useful in reading, history or arithmetic. These words are not necessarily proper for a spelling curriculum. Research shows that the overlap of reading and spelling vocabularies is not at all complete. The practice of using reading words as the basic source of spelling words cannot be justified.

The spelling core should be compiled from valid writing sources, principally investigations of vocabulary of the real writing of child and adult. The child writing investigations are necessary to identify words the child needs most in writing in the initial stage of learning and at various stages of his development. The adult investigation designates the permanent words basic to adulthood. (Fitzgerald, 1951, p. 13)

Lists of words most commonly used in the writing of both children and adults have been determined with considerable accuracy from extensive investigations by Ayres, Buckingham and Dolch, Fitzgerald and McKee, Gates, Horn, Rinsland, Thorndike and others.

The data indicates the importance of a relatively small core of words for writing. Data compiled by Horn (1924) indicated that the one hundred most used adult writing words and their repetitions represented 59 per cent of the total running writing of a sampling of approximately one million running words, and the thousand most used words made up with their repetitions about 90 per cent of the total of the running writing. Rinsland (1945) determined a list of 2909 words which accounted for 90 per cent of the total usage in all the writings of children. Dolch (1942) recommended a list of 2000 words. This

list represents 95 per cent of the words used in adult writing.

Fitzgerald (1934) also emphasized the need for a basic core of words for children beginning to write.

Fitzgerald (195f) has researched child writing and adult writing.

Through this investigation the words which overlap in the writing vocabularies of children and adults were identified. His list "A Basic Life Spelling Vocabulary for Child and Adult" consists of 2650 words.

It is a basic vocabulary for both child and adult and a writing vocabulary useful to normal individuals for life. This list contains the words most often used by children in and out of school and also words that will be used by them as they develop from childhood to adulthood. This list represents 95 per cent of the running words a person will need in his writing throughout his life.

From this list of 2650 words, Fitzgerald derived two other lists.

They are: List A, "350 Most Useful Spelling Words" and List B, "450

Very Useful Spelling Words" (Appendix B). The words selected for

List A are the most fundamental and crucial spelling words, and the

words selected for List B are second in importance only to List A.

Because of the differences in needs and abilities of children,

Fitzgerald (1951^b) and Horn (1968) do not claim that all children of a

grade should learn a certain core of words in that grade. However,

they do note that in spite of the fact individual needs do differ, there
is a common core of words which they will need. The most important

spelling words--words which are needed in writing all his life-should be mastered by all normal children sooner or later.

All of the 350 crucial spelling words are found in the McKee-Fitzgerald (unpublished) child vocabulary, in the Rinsland (1945) vocabulary on child writing, and in Fitzgerald's (1931) investigation of letter writing of fourth-, fifth-, and sixth-grade children. All of the words, except Santa Claus, are in Horn's (1926) A Basic Writing Vocabulary, and all but ten are in Breed's (1930) list. Only twenty-two do not appear in Dolch's (1942) two thousand commonest words and only nineteen are not among the 692 most common words of third-grade life letters researched by Fitzgerald (1938). All but twenty-four are among the 810 commonest second-grade words determined by Brittain and Fitzgerald (1942).

The importance of the 350 crucial words is emphasized by Fitzgerald (1951^b). The need of these words is indicated by the frequency of their occurrence in writing. These words and their repetitions represent 79 per cent of the running words of Fitzgerald's child letter writing vocabulary and 74 per cent of the running words of Rinsland's list.

The "450 Very Useful Spelling Words" are all in the McKee-Fitzgerald (unpublished) child writing vocabulary, in the Rinsland (1945) vocabulary, and in the Fitzgerald (1931) letter writing list. The only words which do not occur in Horn's (1926) adult list are valentines and skates.

According to Fitzgerald:

The eight hundred words in Lists A and B comprise with their repetitions approximately 90 per cent of the running words of the Fitzgerald vocabulary of child letter writing, and account for nearly 66 per cent of the spelling mistakes made by the children in writing the letters basic to this study. These eight hundred words and their repetitions include 83.6 per cent of the running words basic to Rinsland's extensive list. In other words, they were written more than 5,025,000 times in a little over six million writings in his basic data. (Fitzgerald, 1951, p. 21)

The importance of these words in child and adult writing is indicated by their frequent occurrence and their cruciality is suggested from the data on errors made in writing them. These lists could serve as a basic core of words to be taught in the early elementary grades and because of their great value these eight hundred words would be an important consideration for the basic spelling list for the slow learner. The slow learner will need and use these words and they will comprise a greater percentage of his writing than they will for the average or gifted child.

List A is considered most fundamental for the retarded child.

Words from this list should be learned first, as they will be needed
the most. When his needs increase, the words from List B should
then be added.

The very slow child who can master five hundred most important words has a useful stock which will supply a large precentage of the running words needed by him in writing. If, in addition to this basic stock of words, he has mastered a method for learning to spell other words which he will require from time to time, he has acquired a valuable writing tool for life. (Fitzgerald, 1951, p. 22)

In view of the above data, the writer has chosen List A by Fitzgerald as the most useful spelling list for the educable mentally
retarded. This list represents a minimum of words which all children
should learn since they are used so frequently by both children and
adults. The writer has also included a few words from List B by
Fitzgerald as these words follow the same linguistic pattern as the
words in List A.

Recommended spelling list for the intermediate classes for the educable mentally retarded

In programmed spelling Buchanan (1968, 1969) and in programmed reading Engelmann (1970) one sound maintains the same letter representation and the sound is maintained until the child has complete mastery of it. In this way he is able to perceive a relationship between the sound he hears and the letters he sees. Engelmann teaches children how to rhyme using phonetic families and substituting the initial consonant. Habit strength is built on this linguistic relationship. Also the words are programmed according to their difficulty. The shorter words are learned before the longer ones.

Hanna and Moore (1953) wrote that words learned in isolation are likely to remain so with no relation to words of the same sound and

construction. They believe children should learn techniques in spelling which will enable them to proceed successfully in making letter-sound relationships.

Hanna and Hanna wrote:

A phonetic analysis of words and an inductive study of the letter symbols used to spell the sounds in words provide a firm base for the spelling program. This new approach, coupled with a word-study plan which uses the visual and the hand-learning for reinforcement, gives us hope of a day when all our pupils can spell correctly the words they need to write. (Hanna and Hanna, 1960, p. 106)

The writer, as previously indicated, recommends List A by

Fitzgerald. In listing the words in List A and some of the words in List

B, the writer has followed the pattern used in programmed instruction.

Where possible the words are grouped according to their linguistic

pattern and the one-, two-, and three-letter words are listed before
the longer words. (Appendix C).

RESULTS

Twenty-seven questionnaires were sent. Nineteen were returned, three were returned with "moved, left no address" and five did not answer in spite of follow up (telephone call, if possible, or letter) by the writer.

The following are the results of the questionnaires returned from intermediate teachers of the educable mentally retarded in the Granite and Salt Lake City school districts: (Appendix E, Table I - Results of Questionnaires)

- Fifteen teachers have a definite time for spelling each day.
 Four teachers do not have a definite time for spelling each day. (Average time was twenty-two minutes)
- Eight teachers use a regular grade spelling text.
 Eleven teachers do not use a regular grade spelling text.
 Texts mentioned were:
 - a. BYU Individualized Spelling (1)
 - b. Spelling Goals (levels 2-4) (1)
 - c. Spelling for Word Mastery (2-4) (1)
 - d. Other teachers failed to indicate text used.
- Fifteen teachers have a weekly spelling list.
 Four teachers do not have a weekly spelling list.

4. One teacher uses a curriculum guide for the educable mentally retarded.

<u>Eighteen</u> teachers do not use a curriculum guide for the educable mentally retarded.

- a. Cincinnati Public Schools (1)
- Thirteen teachers say the functional spelling needs of the students are being met.

 $\underline{\underline{\text{Two}}}$ teachers say the functional spelling needs of the students are not being met.

Four teachers are unsure.

 Fifteen teachers would like a functional spelling list for the educable mentally retarded.

Four teachers do not think a list is necessary.

- 7. The following means are used by teachers in the selection of spelling words:
 - A. Basic readers
 - (1) Eight teachers choose words from the basic readers.

<u>Eleven</u> teachers do not choose words from the basic readers.

Readers used:

- a. Stanwix House readers (3)
- b. Sullivan's Programmed Reading
- c. Other teachers who checked the item did not indicate what readers they used.

B. Word lists

- (1) Ten teachers use the 220 Dolch basic word list.

 Nine teachers do not use the 220 Dolch basic word list.
- (2) <u>Two</u> teachers use the Fitzgerald list of "350 Most Useful Spelling Words".

<u>Seventeen</u> teachers do not use the Fitzgerald list of "350 Most Useful Spelling Words".

(3) One teacher uses other spelling lists.

Eighteen teachers do not use other spelling lists.

- a. 100 Emergency Words for the EMR (1)
- C. <u>Fourteen</u> teachers use words from the writing of the children.

<u>Five</u> teachers do not use words from the writing of the children.

D. <u>Twelve</u> teachers use words from the environment needed for survival.

Seven teachers do not use words from the environment needed for survival.

- E. <u>Thirteen</u> teachers use words from unit studies.
 Six teachers do not use words from unit studies.
- Eighteen teachers indicated there was a need for improving the spelling program for the educable mentally retarded.

 One teacher indicated there was no need for improving the spelling program for the educable mentally retarded.
 (Appendix D - index of teaching materials cited)

Summary of results

Although the study was conducted during the summer and the number of responses to the questionnaires may have been affected due to this, still enough responses were received to indicate a general trend in spelling for these classes. It was revealed that practically all of the teachers still prefer a formal spelling program and that they also have a weekly spelling list. Half of the teachers use a regular grade spelling text, while one teacher indicated the spelling program was individualized. Only one teacher noted the use of a curriculum guide for the educable mentally retarded.

All but two of the teachers thought the functional spelling needs of the students were being met and two were unsure. However, all of the teachers except four wanted a list of functional spelling words for the educable mentally retarded.

In the selection of spelling words for these students some of the teachers said they used words from the basic readers. Several chose words from the Dolch list; only two used the Fitzgerald list and one mentioned another list. Most of the teachers chose words from the writings of the children and from unit studies. Some of them selected words from the environment.

Only one teacher was completely satisfied with his spelling program. The other teachers were interested in a better functional spelling program being developed for the educable mentally retarded. At the present time it would seem that each teacher has his own method of teaching spelling and choosing the spelling words.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary and conclusions

The purpose of this paper was to investigate the spelling programs of the intermediate classes for the educable mentally retarded in the Granite and Salt Lake City school districts. The writer felt (based on past observations and on past teaching experiences in the intermediate classes for the educable mentally retarded) that teachers have no consistent rationale for choosing spelling words. For this purpose questionnaires were sent to the teachers of these classes, to learn about spelling programs presently conducted in these districts. In order to analyze the questionnaire results more effectively, a survey of available literature in this field was made. From this literature a list of the most essential spelling words was selected and these words were arranged in their phonetic families where possible and were listed according to difficulty within that group.

As a result of the information received, the writer concludes that these teachers have shown that current spelling programs for the educable mentally retarded are inadequate, mainly because they are not functional. Practically all of the teachers surveyed still use the weekly spelling list, though studies (Ingram, 1960) reveal minimal carry-over of words memorized from the weekly spelling list to actual spelling situations. Many teachers based word selection on unit

studies. This method too, is inadequate unless words are frequently used by the child in writing. The use of environmental words is also questioned. It is important that the child read and recognize these words, but these are words which he seldom writes.

The study indicated teachers are not familiar with essential writing word lists for children and adults. About half of the teachers noted they use the Dolch 220 basic word list and only two used the list by Fitzgerald, "350 Most Useful Spelling Words".

Ingram (1960) says that the real needs in spelling will be realized by choosing words from the writings of the children. The other authorities in the field of mental retardation and spelling (cited in the Review of Literature) also believe this to be true. Most of the teachers did indicate they selected words from the writings of the children, in addition to other methods of word selection.

It appears that the teachers do have a variety of ways in which they select their spelling words. Practically all of them indicated an interest in improving this area of teaching. Because of this, the writer concludes that there is need for further work in the curriculum of spelling for the educable mentally retarded.

Recommendations

The writer would recommend the development of a more functional spelling program for the educable mentally retarded. This should include the teaching of the most essential spelling words used by

children and adults as these words will be especially important in the writing vocabulary of the educable mentally retarded. These words should be introduced in a realistic context directly related to daily life, thus motivating the student. List A: "350 Most Useful Spelling Words" by Fitzgerald is the best list presently available. In addition individualized spelling lists should be used, thereby meeting the needs of each child's writing and vocabulary. Group spelling time should be devoted to teaching students words in subject areas that are necessary to know, words that lend themselves to phonetic generalizations and troublesome words like homonyms that the student should know. After the development of such a program, an in-service training for teachers would be beneficial.

The more functional the spelling curriculum, that is, the more it concerns life situations in which the child is involved, the more meaningful it will be to him. Through this means, the importance of spelling will be realized and one of the persisting life problems--communications--for the educable mentally retarded will be alleviated. He will be able to communicate more effectively in writing.

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APPENDIXES

APPENDIX A

Questionnaire

Do y	you have a specific amount of time each day designated for
spel	ling? YesNo How many minutes?
(Spe	lling - a systematic method of learning how to spell words)
Do y	ou use a regular grade spelling text(s) appropriate for the
spel	ling level? Yes No Specify which one(s) and
give	grade level
Do y	ou have a weekly spelling list? YesNo
Do y	ou follow a spelling program suggested by a curriculum guide
for t	he EMR? Yes No Specify which one(s)
Are	the functional spelling needs of the students being met by the
pres	ent spelling program? Yes No
Shou	ld there be a list of functional spelling words for the EMR?
Yes_	No
	ctional spelling vocabulary - words used in highest frequency ritten vocabulary now and in adult life)

How	do yo	ou determine your choice of spelling words? Do you
activ	ely a	nd directly seek words from:
((a)	the basic readers? yes no specify which
		one(s) and give grade level
(b)	the 220 Dolch basic word list? yes no
(c)	the Fitzgerald list of "350 Most Useful Spelling
		Words"? yesno
(d)	other suggested spelling lists? yesno
		specify which one(s)
(e)	the writing of the children? yes no
(:	f)	the environment needed for survival? yesno
(g)	unit studies? yesno
The p	urpo	se of this questionnaire has been to seek information
from	prof	essionals who are in daily contact with children who are
EMR.	We	e are interested in improving or modifying the functional
spelli	ng li	st appropriate for mentally retarded children. What ar
your o	comr	nents on this goal?

APPENDIX B

Fitzgerald's List A: 350 Most Useful Spelling Words Fitzgerald's List B: 450 Very Useful Spelling Words

List A: 350 Most Useful Spelling Words

a about across	both box boy	does dog doll	get getting girl	ice if I'm	more morning most
after	boys	done	girls	in	mother
afternoon	bring	done don't	give	interesting	
again	brother	door	glad	into	my
all	brought	down	go	is	name
along	but	dress	goes	it	near
always	buy	each	going	just	never
am	by	eat	good	keep	new
an	call	eggs	got	kind	next
and	came	eggs	got grade	know	nice
another	came	end enjoyed	grade	last	night
	candy	every	had	left	no
any	candy	far	hair	let	not
are	children	father	hand	letter	now
around	Christmas	feet		like	o'clock
	class	fifth	happy hard	liked	of
as	class	find	THE THE STREET	little	off
at			has	157.5	oh
aunt	clothes	fine	have	live	old
away	cold	fire	he	long	
baby	come	first	head	look	on
back	comes	fish	heard	lot	once
bad	coming	five	help	lots	one
ball	corn	flowers	her	love	or
be	could	food	here	made	other
because	couldn't	for	high	make	our
bed	country	found	him	making	out
been	cousin	four	his	man	over
before	daddy	friend	home	many	pair
best	day	friends	hope	may	paper
better	days	from	horse	me	party
big	dear	front	horses	men	people
black	did	funny	house	might	picture
blue	didn't	game	how	milk	pictures
book	dinner	games	hurt	miss	place
books	do	gave	I	money	play
		177			

played she sure to wash playing shoes table today water please should take together way teacher told pretty show we program sister teacher's too well put six tell took went rain small ten town were read snow thank what tree reading SO that trees when the where red some two. remember something their under which sometimes them ride until while right soon then white up who room spelling there upon these whv run spring us said started they will use Santa Claus stav thing used winter saw wish staved things verv store think visit with say school third won't storv walk second street this want work see summer three wanted would seen Sunday through write wants set supper time writing was

written
year
years
yes
yesterday
yet
you
your

List B: 450 Very Useful Spelling Words

chicken cousins afraid ask bicvcle built bird chickens cow age asked busv birds cake child cows assembly ago air ate birthday called church cross bit city cut airplane awful cannot board can't clay cute all right awhile dad almost babies boat card close dance alone bank body care coal bottom coat dark already barn carry also basket bread cars color Dec. colors December animals bath breakfast cat beautiful decided company answer broke catch brothers caught cook deep anything began behind brown cave corner desk apple died apples being build cents cotton different April bet building chair course

dirt floor houses living only round dishes flower hundred looked open rubber doctor running flv hunt looking orange doesn't folks hunting looks oranges same foot lost outside sand dogs hurry sat doing football ice cream lovely own dollars 1'11 lunch paint Saturday forest draw important mad says forget papa dresses forgot inches mail park sea drink fourth Indian makes seat part sell drv Friday ink mamma pass fruit inside March send during pen sent early full instead maybe pencil Easter fun iron mean pet seven isn't meat piano several eating garden shall it's egg geography meet pick I've picnic shoot eight gets merry else Jan. middle pie short gives sick enjoy glass jump mine piece minutes places side enough gone kept silk kill Miss plant even grades plays since evening grandma killed month grandmother kinds mountains pony sing ever sisters everybody grass knew mouth poor sit everyone great knife move present moved sitting everything green lady presents eyes grow lake Mr. P.S. skates land Mrs. pull skating face guess fair mud quite sled gun language rabbit sleep fall half large music family Halloween must rabbits snowing largest farm handkerchiefs late myself radio soap someone named raining fast hands later fat names ran sometime hardly laugh Feb. ready song hat lav nearly real sorry February haven't learn news feed having learned nine received south leave north recess spend feeling hav stand fell hear leaves nothing rest Nov. riding stars few helped lessons hill letters number state field ring fight hit light nuts river stick road sticks finished hold likes ocean lines Oct. rode still fishing hole flag hospital lived often roll stockings flew rope stop hot lives ones

surprised	than	toy	valentine	wind
sweet	thanksgiving	train	valentines	window
swim	that's	tried	wagon	windows
swimming	those	trip	warm	without
takes	thought	truck	wasn't	women
talk	throw	truly	wat ch	won
tall	till	try	wear	wood
teach	times	trying	weather	woods
teacher	tired	turn	week	word
teeth	tomorrow	twenty	weeks	words
tells	tonight	uncle	wet	working
test	top	vacation	wild	world
				wouldn't
				wrote
				yard
				yellow
				yours
	sweet swim swimming takes talk tall teach teacher teeth tells	sweet thanksgiving swim that's swimming those takes thought talk throw tall till teach times teacher tired teeth tomorrow tells tonight	sweet thanksgiving train swim that's tried swimming those trip takes thought truck talk throw truly tall till try teach times trying teacher tired turn teeth tomorrow twenty tells tonight uncle	sweet thanksgiving train valentines swim that's tried wagon swimming those trip warm takes thought truck wasn't talk throw truly wat ch tall till try wear teach times trying weather teacher tired turn week teeth tomorrow twenty weeks tells tonight uncle wet

APPENDIX C

Fitzgerald's List A and selected words from List B grouped according to their linguistic pattern and difficulty

Short A Words	Irregular Words	et	Irregular Words
		get	
as	ar	let	er
as	far	set	her
has	car	yet	over
	cars		never
ad		en	under
bad	all	men	paper
had	all	ten	supper
dad - 2	ball	then	summer
glad	call	when	dinner
	small	open	corner - 2
at		written	flower
at	Others Words	chicken - 2	flowers
cat	last	chickens - 2	teacher
that	class	children	teachers
	happy		December - 2
an		end	remember
can	Irregular	end	
man	are	friend	Other Words
	saw	friends	yes
am	was		best
am	wash	ell_	dress
program	walk	tell	them
	want	well	want
and	wants		help
and	wanted	ead	next
hand	card - 2	head	left
	dark - 2	read	eggs
ank	started	ready	
bank - 2		bread	Short I Words
thank	Short E Words		
			is
ack	ed		is
back	bed		his
black	red		this

(2 indicates words are from List B)

$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
bit - 2 first <u>ut</u> make	
visit third but take	
cut - 2	
in Short O Words ame	
in up came	
again ot up name	
cousin got upon game	
not games	
ish lot Other Words	
fish lots us air ere	as air
PLEASURE STATE STA	there
•	where
	ir as air
milk upon much	their
silk under	
ong summer day	
ive long supper Sunday	
give along Friday	
live Irregular Saturday	
Irregular Words put today	
	- 2
bring other church - 2 yesterda	
	y
spring other thing mother Long A Words Irregula:	r Words
things another Holl A worlds IT egala.	1 110100
8	
, ,	
34.4.3.4.4.3.4.4.3.4.4.4.4.4.4.4.4.4.4.	
Other Words of way Other W	orda
	
big dog always table (e	silent)
did doll clay baby	
six from play rain	
him o'clock played	
miss across playing <u>Irregula</u>	r
will stay said	
with Irregular stayed have	
fifth of aunt	
fifth of aunt think money ade	
fifth of aunt	

Long E Words	Long I Words	Long O Words	Irregular Words
<u>e</u>	ind	<u>o</u>	ow as ou
be	find	no	how
he	kind	go	now
me		SO	C OW
we	ite	also	cows
she	white		flower
	write	oy boy	flowers
ee			out
see	ice	boys	out
tree	ice	enjoy	out
trees	nice	enjoyed	about
three			
	ive	Long O Words	ound
eet	five		found
feet	live	old	ground
street		old	around
	Other e silent	cold	
ear ere as ear	ride	told	own
dear here	fine		down
near	fire	or our	town
year	like	or four	brown - 2
years	liked	for your	
	while	door	one
each	time	color - 2	one
each	sometimes	colors - 2	done
teacher			
teachers	ight	ore	ome
	might	more	come
Other Words	night	store	comes
eat	right	before	some
read	6		
clean	Y as Long I	ow as o	ook
people	my	know	look
people	by	show	took
Irregular	buy	snow	cook - 2
Irregular the	why	511.5W	book
were	vv 11 y		books
	Other Words		DOORB
heard	Other words		and
	I'm		ood
			food
	high		good

oon	Long U Words	ry	ther
soon		very	other
afternoon	use	every	mother
	use	story	brother
o as oo	used	country	brothers - 2
to			father
do ou as oo	ure	rk	together
two you	sure	work	
too ue as oo	picture	dark - 2	n't
who blue	pictures		can't
into		nk	don't
	Other Phonograms	bank - 2	won't
Other Words		thank	didn't
oh	ce as s	think	doesn't
most	ice		couldn't
both	nice	sh	
goes	once	fish	ing - ending
clothes	place	wish	going
home	dance - 2	wash	making
hope	_		coming
work	dy as e	<u>lk</u>	writing
corn	body - 2	milk	getting
corner	candy	silk	reading
morning	ready - 2	walk	spelling
horse	daddy		interesting
horses		<u>ch</u>	Thanksgiving - 2
	se as z	each	
Irregular	use	much	Other Words
our	used	which	their
love	these	church - 2	money
room	please		second
body - 2	because	rd	Christmas
does	_	hard	Santa Claus
doesn't	ty as e	card - 2	arithmetic
shoes	party	board - 2	
board - 2	pretty	heard	
house		¥	
school	nt .	ter	
country	aunt	after	
through	want	water	
brought	wants	better	
	wanted	letter	
		sister	
		winter	

APPENDIX D

Index of publisher of reading and spelling programs cited

Reading and Spelling Programs	Publisher
100 Emergency Words for the EMR Curriculum Guide for the EMR. 1963	Salt Lake City Public Schools Salt Lake City, Utah
220 Dolch basic word list	Garrard Press, Publishers Champaign, Illinois
BYU Individualized Spelling	BYU Educational Center Provo, Utah
Spelling for Word Mastery (2-4)	Charles E. Merrill Books Educational Center Columbus, Ohio
Spelling Goals (2-4)	Webster Division McGraw Hill Book Company San Francisco, California
Stanwix House Series	Stanwix House, Inc. 3020 Chartiers Avenue Pittsburgh, Pennsylvania
Sullivan's Programmed Reading	Webster Division McGraw Hill Book Company San Francisco, California

APPENDIX E

Table I - Results of Questionnaires

Table I - Results of Questionnaires

Teacher	Formal splg. prog.		Time Minutes	Reg gr. text	splg.	H	Splg. Goals st (2-4)	Spelling for word mstry (2-4)	spl list	Weekly splg. list used		r. de EMR	Cinn. D Public fi Schools a	spl	nc. g. need met		Need a func. splg list for	
H	yes	no	. 4	yes no		BYU. splg	Spl Go (2	Spe wo	yes	_	use yes		Cir Pu Sch	yes	unsure	no		EMR
А	Х		30	X		X			Х			Х			Х		X	
В	X		20	X			X		X			X				X		X
С	X		30	X					X			Х		X			Х	
D	X		20		Х				X			Х		X			X	
E	X		15	X				X	X			Х		X				Х
F	X		15	X					X			Х		X			X	
G		Х		Х				X	Х			Х		X			X	
Н	X		20	X					X		X.		X	X			X	
I	X		20		Х				X			X		X				X
J	X		30		X				X			Х		X			X	
K	X		10		X				X			X				X	X	
L		X			X					X		X				X	X	
М		Х			X				X			X		X			X	
N	X		40	X					X			X			X		X	

Table I (Continued)

Teacher	Formal splg. prog.		splg.		Time Minutes			Ind	Splg. at Coals x (2-4)	ng ms	Wee spl list	t	Cur guid for I	de EMR	Cinn. D Public fi. Schools p		nc. g. need e met	s	list	splg
H	yes	no	Z Z	yes		BYU splg	Sp Go (2	Spow	yes	no	yes	no	SHC	yes	unsure	no	yes	no		
0	X		15		X		X			X		Х		X				X		
P	Х		15		Х				X			Х		X			Х			
Q	X		10		X					X		X		X			X			
R		Х			Х					Х		Х			Х		Х			
S	X		20		X				Х			Х		Х			X			
Tot.	15	4	22	8	11	1	2	2	15	4	1	18	1	13	4	2	15	4		

Table I (Continued)

	Bas	sic	- Rd	rs.				-	S	plg.	wor	ds	selecte	ed fi	om;	-			Splg. pr	og. for
Teacher	rdrs. used		Sullivan's Prog. Rdg% Stanwix		Dolch		Fitzgerald's list		Other		100 Emgncy.		Children's writing		Environ		Unit		Inter. EMR should be improved	
	yes	no			yes	no	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Α	X		X			X		X	X					X		X		X	X	
В		X				X		X	X					X		X		X	X	
С	X				X		X			X			X		X		X		X	
D E F G		X			X			X	X		X		X		X		X		X	
E		Х			X			X	X				X			X	X		X	
F		X				X		X		X			X		X		X		X	
G		X			X			X	X				X		X		X		X	
H	X				X			X		X			X		X			X	X	
I	X					X		X		X				X		X	X			X
J		X			X		X			X				X		X		X	X	
K		X			X			X		X			X			X	X		X	
L	X			X	X			X		X			X			X		X	X	
M	X			X		X		X		X			X		X		X		X	
N		X				X		X		X			X		X		X		X	
0		X				X		X		X			X		X		X		X	
P	X					X		X		X			X		X		X		X	
Q		X				X		X		X			X		X		X		X	
R	X			X	X			X		X				X	X			X	X	
S		X			X			X		X			X		X		X		X	
Tota	als 8	11	1	3	10	9	2	17	5	14	1		14	5	12	7	13	6	18	1