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A comparative study of students using the I/T/A and the Ginn materials

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A COMPARATIVE STUDY OF THE ACHIEVEMENT OF STUDENTS USING THE I/T/A AND THE GINN MATERIALS

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by

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APPROVAL SHEET

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CHAPTER I

STATEMENT OF THE PROBLEM

Within the last few years there has been a great deal of interest in giving aid to children who are reading below their grade level. Various methods and techniques designed to raise the reading level of children have been tried and tested. According to recent studies, some of these methods have brought about greater achievement on the part of students with reading difficulties. The purpose of this study is to compare the achievement of students from two selected school systems in the Georgia Summer Reading Program, 1965.

During the summer of 1965, 142 school systems in the state of Georgia participated in the Summer Reading Program sponsored by the Georgia State Department of Education. The participating school systems had the option of using any one of nine traditional basal reading programs or the Science Research Associates Laboratory materials, the Programmed Reading Materials published by McGraw-Hill Publishing Company, individualized reading materials, the Language-Experience Approach developed in San Diego, California, and the reading materials using the Initial Teaching Alphabet. The program was in operation from May 28, 1965, to August 4, 1965.

The writer explained the design of his proposed study to the state director of the Summer Reading Program and asked for access to the participating systems. The state director granted the writer permission to visit the systems and to use whatever data the teachers had collected that would be necessary to the completion of the study.

Because of the interest of the writer in the Initial Teaching Alphabet (hereafter referred to as i/t/a), a school system using materials incorporating this alphabet was selected for comparison with a system using one of the traditional programs. The Marietta, Georgia, system made use of the materials employing the i/t/a and was selected along with the Athens, Georgia, system which made use of the Ginn and Company basal reading program. These two systems were selected because they are approximately the same size in population and because they are geographically located near a large metropolitan center.

In order to become familiar with the students participating in the selected systems, the writer twice visited the Marietta and the Athens systems during the summer program. The writer visited once during the first half and once during the second half of the program.

The children in both systems participating in the program appeared to be enthusiastic and interested in raising

their reading abilities. They appeared to be having no difficulties in working with their teachers. The writer also noticed no appreciable differences in the physical facilities of the two systems which would be detrimental to the learning process of the students.

The writer also visited twice with the teachers of the Marietta and the Athens systems during the summer program. In talking with the teachers he discovered that they had never taught the particular materials they were using during this program. While the teachers actually had no experience in teaching the materials, they were enthusiastic and appeared to be quite interested in aiding the students during the program.

The children participating in this program were of average ability or above. They were enrolled in grades one through three in the school year 1964-1965, with priority of selection being first grade, then second grade, and finally third grade. It was decided that only disabled readers, i. e. children who are not reading on their grade level, would be permitted to participate. Other criteria used in the selection of students for the Summer Reading Program were: (1) the children should have no recognized emotional problems, (2) they should be members of families who wanted their children to participate in the program, and (3) they should be children

recommended by their classroom teachers.[1] In the systems selected, there were thirty-four students in Marietta who were using materials incorporating i/t/a and forty-one students in Athens who were using the Ginn Basal Readers.

To determine whether a student met the criteria for participating in the Summer Reading Program, each student was administered a group intelligence test, a group reading test, and an informal reading inventory by his regular classroom teacher. Teacher judgment was also a factor in determining the eligibility of children for the program. The screening of the students was done between April 1, 1965, and April 30, 1965.

It was the responsibility of the superintendent of each school system to select the teachers who were to be employed in his system. As criteria for their participation in the program, the teachers were required to possess the following qualifications: (1) strong background study and successful experience in the teaching of reading, (2) an evident understanding of child growth and development, (3) an interest in and desire to participate in the teaching of remedial reading, and (4) a four-year professional certificate.[2] The number of years a teacher had taught reading

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[1] Georgia Summer Reading Program, 1965 (Division of Curriculum, State Department of Education, 1965), p. 4.

[2] Ibid., p. 6.

was not used as a criteria for her acceptance into the program. The final selection of teachers was subject to the approval of the state director of the program.

In order to establish the success or failure of the Summer Reading Program, each student was administered the Gates Primary Reading Tests for Word Recognition, Sentence Reading, and Paragraph Reading Form I as a pre-test, and the Gates Primary Reading Tests for Word Recognition, Sentence Reading, and Paragraph Reading Form II as a post-test. The writer asked the state director of the Summer Reading Program for permission to administer other tests to determine the achievement of the students in the Marietta and the Athens systems. Although the writer was denied this permission, the state director did consent to make available to him the data collected by the teachers. It was from the data collected from these tests that the writer compared the achievement of the students in the Marietta system with those in the Athens system.

Although there has been much interest in i/t/a and its application to teaching reading to disabled readers, the writer has attempted to determine whether there is a significant difference in the achievement of the students participating in

the program in the Marietta system, which used materials employing i/t/a, and the achievement of students in the Athens system, which used the Ginn Basal Readers, a traditional method of teaching reading.

CHAPTER II

SURVEY OF RELATED LITERATURE

With the vast resources and wealth of available materials in America, more than anywhere else in the world, can there be any reason why approximately forty million Americans are unable to read and interpret even the simplest of concepts?

> The latest statistics indicate that in the 25-year-old or older group, there are about eight million people with four or less years of formal schooling and there are about thirty-one million with five to eight years of education. One of the primary reasons for the high number of dropouts is their apparent lack of the ability to read.[1]

Why didn't these dropouts learn to read? What makes learning to read difficult? There are, of course, a variety of reasons why a child is not able to read. The writer was particularly interested in one of the more difficult problems a child encounters when he first attempts to read. This is the problem of learning which of the letters of the alphabet stand for the sounds which make up the words of the language.

Undoubtedly one of the major problems for the beginning reader of English lies in the fact that there are only 26 letters in the alphabet to represent the 40 or more sounds,

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[1] The Story of i/t/a (New York: Initial Teaching Alphabet Publications, Inc., 1965), p. 1.

the phonemes of English. As a result, the child must learn that, for instance, the vowel sound in pie may be spelled in many ways. Otherwise, the child would logically spell buy (bie), sigh (sie), aisle (iel), and kite (kiet). One can readily see that one of the earliest difficulties a beginning reader faces is learning to associate the correct symbol with the sound.

In an effort to make it easier for children to learn to read the traditional alphabet, Sir James Pitman created a teaching tool called the Initial Teaching Alphabet (i/t/a).

> Sir James Pitman is a member of the committee supervising the research being conducted by the University of London's Institute of Education and the National Foundation for Educational Research in England and Wales. Sir James is the Member of Parliament for Bath.[2]

The Initial Teaching Alphabet has 44 symbols instead of the conventional 26, and each of the symbols represents one and only one sound. Of the 44 characters, 24 are the traditional ones, and 14 of the augmentations resemble two familiar letters joined together. The other special symbols represent the remaining phonemes.

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[2]Sir James Pitman, K. B. E., M. P., The Future of the Teaching of Reading (New York: Initial Teaching Alphabet Publications, Inc., 1965), p. 1.

> The i/t/a and its spellings provide a medium combining absolute consistency in word and sentence patterns with absolute reliability in character-to-sound relationships to furnish effective clues for relating the printed word to the spoken word. Its major goal is to teach children to read more effectively in our traditional alphabet.[3]

Figure 1, page 10, shows the 44 characters used in the i/t/a and the sound each character represents. The figure illustrates how the one-to-one correspondence between sound and symbol can be accomplished through i/t/a.

> Sir James took pains to make it clear that the alphabet is not a design for reforming spelling but a device for teaching reading to be used in the initial stages only. It was "a teacher's tool," a grading of the material for the early stages of teaching, one to be left behind and forgotten when it achieved its teaching purpose.[4]

The Ginn Basal Readers employ a controlled vocabulary and a phonetical approach to the teaching of reading, similar in format to those published by Harper & Row and Scott-Foresman. These so-called basal readers have been the predominant method used to teach reading in American elementary schools for the past thirty years. In addition to the basal readers, the Ginn

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[3] Ibid.

[4] Maurice Harrison, The Story of the Initial Teaching Alphabet (New York, Toronto, London: Pitman Publishing Corporation, 1964), p. 106.

æ face	b bed	c cat	d dog	ɛɛ koy
f feet	g leg	h hat	ie fly	j jug
k key	l letter	m man	n nest	œ over
p pen	r girl	r red	s spoon	t tree
ue use	v voice	w window	y yes	z zebra
s daisy	wh when	ch chair	th three	ħ the
ʃh shop	ʒ television	ŋ ring	a father	au ball
a cap	e egg	i milk	o box	u up
ω book	ω spoon	ou out	oi oil*	

*i/t/a Bulletin, Volume 2, No. 4 (Summer, 1965), p. 8.

FIGURE 1

I/T/A ALPHABET AND SOUNDS

series also provides several supplementary books which are to be used to deal with the individual differences of students' abilities within the elementary classroom.

The earliest experiment with the i/t/a was done in London, England.

> The sponsors of the first i/t/a reading research, which began in the schools in London in September, 1961, were the University of London Institute of Education and the National Foundation for Educational Research in England and Wales.[5]

In the research conducted by the Reading Research Unit of the University of London Institute of Education, attainments of children using i/t/a were compared with the achievements of pupils learning with the traditional orthography (t. o.).

> After only five months the four- and five-year-old beginners who were using i/t/a materials were significantly in the lead. By the end of the first school year the average i/t/a child was at the Primer 2 level of the reading program, while the average t. o. pupil was still at Primer 1.[6]

John Downing, the Reading Research Officer of the Reading Research Unit of the London Institute of Education,

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[5]John Downing, "How i/t/a Began," Elementary English, 44: 42, January, 1967.

[6]John Downing, "The i/t/a (Initial Teaching Alphabet) Reading Experiment," Reading Teacher, 18: 105 (November, 1964).

further reported that after the first two years of the experiment, creative writing appeared much improved by the i/t/a classes and that by the middle of the third year of schooling the i/t/a pupils were able to spell t. o. words significantly better than the children who had been reading and writing with t. o. only.[7]

Some British educators have viewed the apparent success of i/t/a with suspicion. They wondered whether it should be necessary to require all children to learn to read by this method. In their search for information to make proper decisions concerning the future use of i/t/a, the educators asked what problems one might expect to encounter while using the i/t/a.

In answer to the question, "What's wrong with i/t/a?" John Downing first set about to distinguish and set apart from the essence of i/t/a the separate issue of materials using i/t/a, teaching methods in i/t/a classes, and investment and profit from i/t/a publishing. He indicated that there will always be criticism of these aspects of i/t/a but that they are not essential to a judgment of the basic principles of the idea behind i/t/a.

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[7] Ibid., p. 109.

In determining whether there is anything wrong with the i/t/a writing system itself, Mr. Downing quoted from the results found in the British i/t/a research experiment previously reported on in this study. He pointed out that the successes of i/t/a found in this study should not be overlooked.

Mr. Downing further related that the results are encouraging but they are not good enough. He believed additional findings in the British i/t/a study suggested certain weaknesses that should be explored. A description of the weaknesses follows:

> The plateau or regression effect at the transition stage suggests that attempts should be made to reduce this loss. Improvements in teaching methods may help, but what is urgently needed now is a reappraisal of the i/t/a writing system itself.
>
> The errors made by children after the transition stage often occur in words which have highly singular configurations, but some misleading individual letter or letters in the t. o. spelling (e. g., ch in school, s in island, c in ceiling) seemed to have caused errors in the post-transition t. o.[8]

In summary, Mr. Downing admitted that there are some things wrong with the i/t/a writing system itself, and that

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[8]John Downing, "What's Wrong With i/t/a?," Phi Delta Kappan, Volume 48, p. 263 (February, 1967).

despite the various successes of i/t/a there is room for improvement on i/t/a's present design.

Although the name 'Initial Teaching Alphabet' had its beginning in the United States in 1963, the writing system itself existed under the name "Augmented Roman" at an earlier date.

Materials incorporating the i/t/a have been used experimentally in the United States since 1963; however, most of the experimentation has been done with children participating in remedial programs and until now no attempt has been made to compare students' achievement in systems participating in state programs.

According to an article appearing in the 1965 Library Journal, the 44-letter transition alphabet was introduced in the United States after three years of successful experimentation by Pitman in England.

> By adding letters to take care of the phonetic irregularities of the traditional alphabet, i/t/a eases the way for children, who in beginning reading need a consistent set of sound symbols.[9]

At some time (generally about two years) the alphabet closes the gap between the spoken and written vocabulary. "Used in remedial programs, kindergarten, reading readiness,

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[9]"i/t/a: A Reading Revolution," Library Journal, 90: 50-58 (November, 1965).

and adult literacy classes, the i/t/a has proven to be highly effective in all instances."[10]

According to William D. Boutwell:

> The average child who is ready for school already understands and uses about 3500 words. However, most children do not attain workable skills in reading and writing until the fourth grade.[11]

Dr. Boutwell also explained that the Basal Reading Programs (including Ginn & Company) usually introduce about 350 words in the first year and since the more than forty sounds of our speech are represented in more than 2000 different ways, many of the children become confused in trying to learn to read and spell. He further indicated that the one-to-one relationship between sound and alphabet symbol provided for by i/t/a would be helpful to the beginning reader.

The Bethlehem, Pennsylvania, system, working closely with Lehigh University, is the largest single system in the United States experimenting with materials incorporating i/t/a.[12] However, there are other systems in the United States which are conducting or have conducted experiments with i/t/a. Among

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[10] Ibid.

[11] William D. Boutwell, "An Easier Way to Learn to Read," P. T. A. Magazine, 59: 11-13 (October, 1964).

[12] i/t/a Bulletin, Volume 2, No. 4 (Summer, 1965), p. 1.

these are the studies conducted by the Nashville, Tennessee, Metropolitan School system in conjunction with Peabody College and the University of Chicago Laboratory School.

In a study comparing reading achievement of students conducted by Albert J. Mazurkiewicz in the Lehigh University--Bethlehem Public Schools, every effort was made to equate the methodology used in both the control and experimental groups. Mazurkiewicz was particularly interested in controlling the methodology used by the teachers because:

> While the reports from the University of London indicated that the materials they used in their studies were identical in both populations except for a change in orthography, the methodologies used by the various teachers in either of the experimental or control populations were permitted to vary according to the basic approach the teacher generally used.[13]

It was found in the study that:

> The use of an i/t/a medium in a language arts oriented program of instruction has a significant value in overcoming the inhibiting effects of the complex relationships of traditional English spelling on early reading instruction.[14]

Mazurkiewicz also concluded:

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[13] A. J. Mazurkiewicz, "Comparison of i/t/a and T. O. Reading Achievement When Methodology is Controlled," Elementary English, 43: 602 (October, 1966).

[14] Ibid., p. 606.

> Since some advantage in favor of the i/t/a medium at mid-year and year-end points were found on word reading subtests and no inferior results were noted on other measures of reading, teachers and administrators may feel confident that the i/t/a medium used in a beginning program of instruction which emphasizes the language arts should result in a somewhat better overall reading performance as measured by standardized tests when the tests are in t. o.[15]

Additional information concerning the results of the achievement of the students participating in the Bethlehem study follows:

> It was found that in the Bethlehem, Pennsylvania, system, which used materials incorporating i/t/a in 1963 through 1964, that after using the materials one year many of the children entering the second grade were reading at third and fourth grade levels. It was also found that after only eight months of working with the materials incorporating i/t/a, many of the students were already reading on the first grade level.[16]

Table I, page 18, shows the reading levels achieved by those students using i/t/a as compared to those using the standard alphabet in the Bethlehem, Pennsylvania, system. From Table I it appears that 24 per cent of the children using i/t/a for one year in the Bethlehem, Pennsylvania, system were reading at the third grade level while none of the children using the standard alphabet were reading at the third grade level. The results also show that 50.7 per cent of the

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[15] Ibid., p. 606.

[16] William D. Boutwell, "Learning to Read with i/t/a," Senior Scholastic, 86: sup 8-9 (March 4, 1965).

TABLE I

A COMPARISON OF I/T/A AND STANDARD READING LEVELS IN THE BETHLEHEM, PENNSYLVANIA, SYSTEM

Reader Level	i/t/a	Standard
Third	24.0%	0.0%
Second	50.7	6.1
First	14.0	74.4
Primer or below	11.3	19.5

*William D. Boutwell, "Learning to Read with i/t/a," Senior Scholastic, 86: sup 8-9. (March 4, 1965).

students using i/t/a were on the second grade reading level, 14.0 per cent were at the first grade level and only 11.3 per cent at the primer or below reading level. At the same time, of the children using the standard alphabet only 6.1 per cent were reading at the second grade level while 74.4 per cent were reading at the first grade level and 19.5 per cent at the primer or below reading level.

The writer discussed the experiment being conducted with i/t/a materials in the Nashville Metropolitan Public School system with Dr. Maggie Bushnell, vice president of i/t/a Publications, Inc. Dr. Bushnell said, "The experiment is being conducted by the Nashville City Schools in conjunction with Peabody College and i/t/a Publications, Inc."[17]

She also related, "The experiment, begun in 1964, has now been in operation for three years and the Ford Foundation has been a sponsor of the program."[18]

In addition, Dr. Bushnell stated that in late June, 1967, there would be a conference in Nashville, Tennessee, concerning the i/t/a experiment being conducted there. Scheduled to attend the conference were such well-known figures

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[17]Dr. Maggie Bushnell, vice president of i/t/a Publications, Inc., in a telephone interview, June 22, 1967. Permission to quote secured.

[18]Ibid.

in i/t/a as Sir James Pitman and Dr. H. J. Tanyzer of Hofstra College.

Dr. Bushnell believed that this conference would provide the impetus for interpretation and evaluation of the achievement of the students participating in the program. She said that while various progress reports, done at intervals throughout the experiment, have been sent to the Ford Foundation, the most useful reports will not be available until after the conference.

Also working closely with the experiment from the Nashville City Schools were Mrs. O. T. Officer, supervisor of i/t/a, and Mr. M. D. Neeley, director of elementary education. The writer discussed the Nashville program with Mr. Neeley. He agreed that the research coming after the conference would be of greater value than any previously done. However, he also said:

> Although the studies which have been done show no significant difference in the reading achievement of the students participating in the program, the students using i/t/a did seem to be able to write better and more creatively than the other students.[19]

Dr. Lloyd Dunn and Dr. Philip Pfost, department of special education, Peabody College, also worked with the Nashville experiment. In an interview with Dr. Pfost

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[19]Mr. M. D. Neeley, director of elementary education, Nashville City Schools, in a telephone interview, July 3, 1967. Permission to quote secured.

the writer was told that in addition to the i/t/a materials, the Houghton Mifflin readers and the Lippincott readers were used. Also used was the Peabody Language Development Kit, which was developed specifically for this experiment.

Dr. Pfost said:

> The children participating in the program were primarily from the culturally deprived areas in Nashville, and the data collected includes only the first year of the program. There will be additional data which will be available after the June conference.
>
> According to the research done by Peabody College, no significant difference occurred at the .05 level in reading achievement between the students using the various materials in the Nashville program. Although additional research is being conducted, the results will probably not be available until the fall of 1967.[20]

In September of 1963 the University of Chicago Laboratory Schools began an i/t/a project in one first grade class. The undertaking was designed as an exploration of a new teaching medium rather than a research project.

> From three kindergarten classes, twenty-five children were selected. The criterion for selection

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[20]Dr. Philip Pfost, department of special education, Peabody College, in a telephone interview, July 3, 1967. Permission to quote secured.

> was obvious: they were all beginning readers, with the exception of a few who were reading at the pre-primer level.[21]

A concerted effort was made to inform the parents of the participating children as to the nature of the project. The parents were asked to attend a movie about i/t/a and afterwards there was a question and answer period.

> The primary questions raised were about outside reading in traditional orthography, transfer to traditional orthography and spelling problems, but not about whether the children would succeed in learning to read through such a program.[22]

Throughout the year the children used Book I of the Early to Read Series published by i/t/a Publications. The children also actively participated in a creative writing program to add to the children's reading vocabulary.

The following observations were made at the conclusion of the second year of exploration of i/t/a as a medium for beginning reading at the University of Chicago Laboratory School:

> (1) children and adults readily learn the alphabets; (2) transfer to traditional orthography is smooth, provided that the child is ready for it;

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[21] Sadako Tengan, "Initial Teaching Alphabet," Experimental Procedures in Reading (The University of Chicago Press, 1965), p. 62.

[22] Ibid.

> (3) i/t/a seems to encourage a freer expression of idea in creative writing; (4) children are more aware of sound-symbol relationships; (5) i/t/a greatly facilitates word analysis; (6) transfer in spelling occurs later than transfer in reading; (7) i/t/a seems to give children that sense of confidence so essential during the early stages of reading.[23]

In one of the twenty-eight first grade studies sponsored by the United States Office of Education during the academic year 1964 through 1965, Edward Fry compared the reading achievement of students using three different methods of teaching first grade reading. The three methods used in the twenty-one first grades which were compared were the Diacritical Marking System (DMS), i/t/a, and the Sheldon Readers published by Allyn and Bacon.

In an attempt to do essentially the same thing as i/t/a with a different method, the DMS was used.

> Since there are more sounds in English than there are letters, i/t/a has attempted to solve this problem by creating additional characters for the language. The DMS attempts to solve the problem by adding diacritical marks to regular letters. Whereas the i/t/a respells many words even when traditional letters are used, the DMS never changes the spelling.[24]

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[23] Ibid., p. 64.

[24] Edward B. Fry, "Comparing the Diacritical Marking System, i/t/a, and a Basal Reading Series," Elementary English, 43: 607 (October, 1966).

The DMS materials used were a specially marked set of the Sheldon Readers. In the entire regular set of the first grade series a mark was put over every word. This had the advantage of pages which looked exactly like the regular Sheldon Readers. In addition to the regular teacher's materials accompanying the Sheldon Readers, the teachers using the DMS were furnished with a set of instructions for teaching the Diacritical Marks to the children.

"Methods to be used in the study were assigned to classrooms at random. Teachers were assigned the methods they would teach by lot."[25] All of the teachers were given the materials to study during the summer and a day of teacher training was given before the classes began in the fall.

Conclusions of the study were as follows:

> There was no significant difference in the silent reading ability tests at the end of the first grade taught by the DMS, the i/t/a, or a regular basal reading series. No oral reading test showed any significant differences except one using only phonetically regular words.[26]

In reference to various experiments with the i/t/a, some educators have questioned as follows:

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[25] Ibid., p. 608.

[26] Ibid., p. 610.

> Perhaps these positive results like so much research that compares one method with another, may be partly attributed to factors other than the use of i/t/a per se. Among these factors are the new, interesting reading materials supplied to the experimental group, the extra workshops and discussions teachers in the i/t/a groups participate in, the involvement of parents, and the publicity given to the positive results of i/t/a.[27]

Dr. E. A. Enstrom, research specialist, Greensburg, Pennsylvania, indicated in a recently published article that he felt that much of the research done concerning i/t/a has been done by persons other than educators. He said:

> Thoughtful educators have always attempted to look behind the scenes of educational movements and seek the weaknesses as well as the strength prior to wholesale adoption of any program.[28]

Dr. Enstrom further stated:

> Let us question every facet and obtain accurate appraisals, but let sound results and time tell the true story. With i/t/a it seems clear that somebody owes us the answers that have not as yet been forthcoming.[29]

As can be expected, the earliest reports on the use of i/t/a came from Britain. Most of the earliest research was

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[27] Ruth Strang, Constance M. McCullough, and Arthur E. Traxler, The Improvement of Reading (New York: McGraw-Hill Book Company, 1967), p. 124.

[28] E. A. Enstrom, "Wanted: Unbiased Answers," Elementary English, 44: 47 (January, 1967).

[29] Ibid., p. 52.

done by John Downing who worked closely with Sir James Pitman in the development and use of i/t/a. Downing is still involved in various research projects concerning i/t/a which are being conducted in Britain.

In 1963 Bethlehem, Pennsylvania--Lehigh University experiment with i/t/a began. It is now the largest single system in the United States using i/t/a materials. Working closely with the Bethlehem experiment was Dr. Albert J. Mazurkiewicz from Lehigh. He has probably published more reports on the use and advantages of materials incorporating i/t/a than anyone else in the United States.

Although the use of i/t/a has become more widespread in the United States, many educators have viewed its apparent success conservatively. They believed that a portion of the success of i/t/a must be attributed to the newness of the material itself, enthusiasm on the teachers' part and the extra teacher workshops in the use of the material.

The writer believed that much of the available evidence found in the related literature would tend to lead one to the conclusion that the materials incorporating the i/t/a are superior to other materials used in the teaching of reading. However, the writer compared the post-test scores of the students using the Ginn Basal Reading Materials with the post-

test scores of the students using the materials incorporating the i/t/a in the Georgia Summer Reading Program to determine whether there was any significant difference in the achievement of reading abilities of the students in the two groups.

CHAPTER III

COMPARISON OF ACHIEVEMENT

As previously stated, the writer chose to compare the reading achievement of the students in the Marietta, Georgia, system which used materials incorporating the i/t/a and the Athens, Georgia, system which used the Ginn Basal Reading Materials.

The total group size of the students using the i/t/a in the Marietta system, hereafter referred to as the i/t/a group, was thirty-four (i/t/a, N=34). Comprising this group were sixteen white males, four white females, eight Negro males, and six Negro females. The ages of the children in this group ranged from six to eleven years. The grade levels of the children ranged from grade one to grade three.

In the Athens system there were forty-one children, hereafter referred to as the Ginn group, using the Ginn Basal Reading Materials in the Summer Reading Program (Ginn, N=41). Comprising this group of students were twelve white males, fourteen white females, thirteen Negro males, and two Negro females. The ages of the children in this group also ranged from six to eleven years. The grade levels of the children ranged from grade one to grade three.

All the children participating in the Georgia Summer Reading Program were administered the Peabody Picture Vocabulary Test and the Peabody IQ Test at the beginning of the program. Tables II and III, page 30, show the scores of the children in the i/t/a group and scores of the children in the Ginn group.

Table II shows the scores the students achieved on the Peabody Picture Vocabulary Test Raw Score. The students in both the i/t/a group and the Ginn group scored in a similar fashion with the largest number of students from both groups scoring in the average ability range on the test. It would therefore appear that the reading abilities of the students in both groups were somewhat equal.

Table III shows the scores the students achieved on the Peabody IQ Test. In both the i/t/a and the Ginn groups the scores of the students indicated a wide range in intelligence. However, since the largest number of students in both groups scored in the average range on the test, it would appear that the two groups of students were evenly matched in intelligence.

Each student participating in the Georgia Summer Reading Program was administered the Gates Primary Word Recognition Raw Score I, the Gates Primary Word Recognition Grade Placement I, the Gates Primary Sentence Recognition Raw Score I, the Gates Primary Sentence Recognition Grade Placement I, the Gates

TABLE II

A COMPARISON OF THE PEABODY PICTURE VOCABULARY TEST RAW SCORES FOR THE I/T/A AND GINN GROUPS

Raw Score	i/t/a	Ginn	
040 - 049	1	7	
050 - 059	9	14	
060 - 069	16	16	
070 - 079	8	3	
080 - 089	-	1	
090 - 099	-	-	
100 - 109	-	-	
N	34	41	Total 75

TABLE III

A COMPARISON OF THE PEABODY IQ SCORES FOR THE I/T/A AND GINN GROUPS

IQ Score	i/t/a	Ginn	
60 - 69	3	2	
70 - 79	2	7	
80 - 89	9	6	
90 - 99	7	12	
100 - 109	6	7	
110 - 119	4	6	
120 - 129	3	1	
N	34	41	Total 75

Primary Paragraph Recognition Raw Score I, and the Gates Primary Paragraph Grade Placement I as pre-tests. Forms II of the above tests were administered to the students as post-tests at the end of the program. The Summer Reading Program began May 28, 1965, and ended August 4, 1965.

Tables IV, V, VI, VII, VIII, AND IX on pages 32, 33, and 34 show the scores the students achieved on the various pre-tests and post-tests administered during the Summer Reading Program.

Table IV shows the scores the students achieved on the Gates Primary Word Recognition Raw Score Tests. Since more students in both of the groups scored higher on the post-test than on the pre-test, it would appear that both groups of students made gains in word recognition achievement during the summer program.

Table V shows the scores the students achieved on the Gates Primary Word Recognition Grade Placement Tests. Gains in achievement by the students in both groups were indicated by the higher grade placement scores achieved by the students on the post-test.

Table VI shows the scores the students achieved on the Gates Primary Sentence Recognition Raw Score Tests. The post-test scores indicate that the Ginn students made gains in

TABLE IV

STUDENT SCORES ON GATES PRIMARY WORD RECOGNITION RAW SCORE TESTS FOR THE I/T/A AND GINN GROUPS

Scores	Form I Pre-test i/t/a	Ginn		Form II Post-test i/t/a	Ginn	
0 - 10	6	17		4	14	
11 - 20	11	13		9	2	
21 - 30	7	8		5	11	
31 - 40	6	3		10	10	
41 - 50	4	-		6	4	
N	34	41	Total 75	34	41	Total 75

TABLE V

STUDENT SCORES ON GATES PRIMARY WORD RECOGNITION GRADE PLACEMENT TESTS FOR THE I/T/A AND GINN GROUPS

Scores	Form I Pre-test i/t/a	Ginn		Form II Post-test i/t/a	Ginn	
1.3 - 1.7	3	16		3	6	
1.8 - 2.2	15	14		11	14	
2.3 - 2.7	10	11		12	10	
2.8 - 3.2	3	-		3	8	
3.3 - 3.7	3	-		5	3	
N	34	41	Total 75	34	41	Total 75

TABLE VI

STUDENT SCORES ON GATES PRIMARY SENTENCE RECOGNITION RAW SCORE TESTS FOR THE I/T/A AND GINN GROUPS

	Form I Pre-test			Form II Post-test		
Scores	i/t/a	Ginn		i/t/a	Ginn	
0 - 10	3	12		8	12	
11 - 20	9	21		7	12	
21 - 30	7	7		7	5	
31 - 40	12	1		7	11	
41 - 50	3	-		5	1	
N	34	41	Total 75	34	41	Total 75

TABLE VII

STUDENT SCORES ON GATES PRIMARY SENTENCE RECOGNITION GRADE PLACEMENT TESTS FOR THE I/T/A AND GINN GROUPS

	Form I Pre-test			Form II Post-test		
Scores	i/t/a	Ginn		i/t/a	Ginn	
1.3 - 1.7	1	9		3	7	
1.8 - 2.2	6	17		9	8	
2.3 - 2.7	12	14		10	15	
2.8 - 3.2	8	1		7	8	
3.3 - 3.8	7	-		5	3	
N	34	41	Total 75	34	41	Total 75

TABLE VIII

STUDENT SCORES ON GATES PRIMARY PARAGRAPH RECOGNITION RAW SCORE TESTS FOR THE I/T/A AND GINN GROUPS

Scores	Form I Pre-test i/t/a	Ginn		Form II Post-test i/t/a	Ginn	
0 - 5	-	8		3	5	
6 - 10	9	15		3	9	
11 - 15	9	14		11	8	
16 - 20	9	4		10	11	
21 - 26	7	-		7	8	
N	34	41	Total 75	34	41	Total 75

TABLE IX

STUDENT SCORES ON GATES PRIMARY PARAGRAPH RECOGNITION GRADE PLACEMENT TESTS FOR THE I/T/A AND GINN GROUPS

Scores	Form I Pre-test i/t/a	Ginn		Form II Post-test i/t/a	Ginn	
1.3 - 1.7	3	11		4	6	
1.8 - 2.2	6	17		5	10	
2.3 - 2.7	18	13		18	14	
2.8 - 3.2	5	-		3	10	
3.3 - 3.7	-	-		-	-	
3.8 - 4.2	2	-		3	1	
4.3 - 4.7	-	-		1	-	
N	34	41	Total 75	34	41	Total 75

sentence recognition reading achievement during the summer program. More of the Ginn students scored higher on the post-test than on the pre-test; on the other hand, the reverse was true for the i/t/a students. There were more i/t/a students scoring lower on the post-test than on the pre-test. This would indicate that there was actually a decline in the sentence recognition reading achievement of the i/t/a students during the summer program.

Although it would be interesting to speculate what caused some of the i/t/a students apparently to decline in their sentence recognition reading achievement, it would be difficult to arrive at the primary cause. Such things as teacher emphasis on other areas of reading instruction could possibly influence the interest and achievement of the students. Also, the i/t/a teachers could possibly be weak in teaching sentence recognition skills.

Table VII shows the test scores the students achieved on the Gates Primary Sentence Recognition Grade Placement Tests. Again it appears that the Ginn students gained in sentence recognition reading abilities during the summer program. More Ginn students scored higher on the post-test than on the pre-test. Since more of the i/t/a students scored lower on the post-test than on the pre-test, it appears that they declined in sentence recognition reading achievement during the program.

As stated earlier, it would be interesting to speculate what caused some of the i/t/a students apparently to decline in sentence recognition reading achievement. However, since a number of factors could have influenced the achievement of the students, the writer was unable to determine the primary cause.

Table VIII shows the scores the students achieved on the Gates Primary Paragraph Recognition Raw Score Tests. Since more of both the i/t/a and the Ginn students scored higher on the post-test than on the pre-test, it appears that both groups made gains in paragraph recognition reading achievement during the summer program.

Table IX shows the scores the students achieved on the Gates Primary Paragraph Recognition Grade Placement Tests. The i/t/a students appeared to achieve slightly higher on the post-test than on the pre-test. Although the majority of the i/t/a students appeared to make little or no gains in paragraph recognition reading achievement during the summer program, a small number did manage to raise their post-test scores.

Since more of the Ginn students scored higher on the post-test than on the pre-test, they apparently gained in paragraph recognition reading achievement during the summer program.

To test for differences in the achievement of the students in the Marietta, Georgia, system which used materials incorporating the i/t/a as compared to the achievement of the students in the Athens, Georgia, system which used the Ginn Basal Reading Materials in the Georgia Summer Reading Program, 1965, the statistical technique of analysis of covariance was deemed most appropriate. This statistical method is particularly useful when groups are to be compared on the basis of their response to a criterion, and individual differences among the members within the groups are either known or suspected to influence the criterion. Through the use of the analysis of covariance technique one can attempt to control these individual differences. It was to provide a means of attaining a measure of control of individual differences that the technique of analysis of covariance was developed.[1]

The purpose of the comparative study was to determine whether the materials used in the two systems was the determining factor causing one or the other of the two groups of students to achieve significantly higher on the post-test criterion measures than the other group in the Georgia Summer Reading Program, 1965.

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[1]Wert, Neidt, and Ahmann, Statistical Methods in Educational and Psychological Research (New York: Appleton-Century-Crofts, Inc., 1954), p. 343.

To determine whether any significant differences in the achievement did occur, the writer used six analyses. The Peabody Picture Vocabulary Test Raw Score, the Peabody IQ, and the various pre-tests administered to the participating students were used as the covariates.

In the first analysis to determine whether there was any significant difference in the achievement of the students between the two groups, the criterion measure used was the Gates Primary Word Recognition II, Raw Score. The covariates were the Gates Primary Word Recognition I, Raw Score and the Peabody Raw Score.

Table X, page 39, shows the results of the analysis for differences in achievement between the groups when the criterion measure was the Gates Primary Word Recognition II, Raw Score. The covariates were the Peabody Raw Score and the Gates Primary Word Recognition I, Raw Score.

The results of the analysis show that no significant difference in the achievement of the students between the two groups in method (materials), Peabody Raw Score, and Gates Primary Word Recognition I, Raw Score occurred.

In the second analysis between the two groups, the Gates Primary Word Recognition II, Raw Score was again used as the criterion measure. The covariates were the Gates Primary Word Recognition I, Raw Score and the Peabody IQ Score.

TABLE X

A COMPARISON OF THE DIFFERENCES IN METHOD, PEABODY PICTURE VOCABULARY TEST RAW SCORE, AND WORD RECOGNITION RAW SCORE I BETWEEN THE I/T/A AND GINN GROUPS

Source	df*	MS**	F***
Error	71	661.84	-
Method	1	700.45	1.058
PRS	1	237.53	0.359
WRRS I	1	946.15	1.450

*degree of freedom
**Mean Square
***F value

Table XI, page 41, shows the results of the analysis for significant differences in the achievement of the students between the two groups when the Gates Primary Word Recognition II, Raw Score was used as the criterion measure with the Peabody IQ and the Gates Primary Word Recognition I, Raw Score as the covariates.

The results of the analysis show that no significant differences occurred in the achievement of the students between the two groups in method, Peabody IQ, and the Gates Primary Word Recognition I, Raw Score.

The Gates Primary Sentence Recognition II, Raw Score was used as the criterion measure in the third analysis for significant differences in the achievement of the students in the Marietta system which used the i/t/a as compared with the achievement of the students in the Athens system which used the Ginn Basal Reading Materials. The covariates were the Peabody Raw Score and the Gates Primary Sentence Recognition I, Raw Score.

Table XII, page 42, shows the results of the analysis for significant differences in the achievement of the students between the two groups when the Gates Primary Sentence Recognition II, Raw Score was used as the criterion measure with the Peabody Raw Score and the Gates Primary Sentence Recognition I, Raw Score as the covariates.

TABLE XI

A COMPARISON OF THE DIFFERENCES IN METHOD, PEABODY IQ, AND WORD RECOGNITION RAW SCORE I BETWEEN THE I/T/A AND GINN GROUPS

Source	df	MS	F
Error	71	657.00	-
Method	1	546.50	0.832
PIQ	1	580.73	0.884
WRRS I	1	581.29	0.885

TABLE XII

A COMPARISON OF THE DIFFERENCES IN METHOD, PEABODY RAW SCORE, AND SENTENCE RECOGNITION RAW SCORE I BETWEEN THE I/T/A AND GIHN GROUPS

Source	df	MS	F
Error	71	765.05	-
Method	1	1789.16	2.339
PRS	1	2.10	0.003
SRRS I	1	6065.49	7.928*

*Significant at the .01 level

The results of the analysis show that there was no significant difference in the achievement between the two groups in method and Peabody Raw Score. In the Gates Primary Sentence Recognition I, Raw Score a significant difference did occur at the .01 level.

A word of explanation as to the significant difference occurring as indicated in the Sentence Recognition I, Raw Score Test results in Table XII is in order. From the raw data used in compiling the test results shown in Table XII, the writer ascertained that the Ginn group scored significantly higher. However, because there could very likely be a number of influencing factors, the primary cause of the significant difference occurring in the Gates Primary Sentence Recognition I, Raw Score cannot be identified.

For the fourth analysis between the two groups, the Gates Primary Sentence Recognition II, Raw Score was again used as the criterion measure. The covariates were the Peabody IQ and the Gates Primary Sentence Recognition I, Raw Score.

Table XIII, page 44, shows the results of the analysis for significant differences between the two groups in the achievement of the students when the Gates Primary Sentence Recognition II, Raw Score was used as the criterion measure with the Peabody IQ and the Gates Primary Sentence Recognition I, Raw Score as the covariates.

TABLE XIII

A COMPARISON OF THE DIFFERENCES IN METHOD, PEABODY IQ, AND THE SENTENCE RECOGNITION RAW SCORE I BETWEEN THE I/T/A AND GINN GROUPS

Source	df	MS	F
Error	71	755.13	-
Method	1	1788.49	2.368
PIQ	1	706.73	0.936
SRRS I	1	5351.80	7.087

The results of the fourth analysis show that there was no significant difference between the two groups in the achievement of the students in method and Peabody IQ. There was a significant difference occurring in the Gates Primary Sentence Recognition I, Raw Score.

Once again it was the Ginn group which scored significantly higher on the Gates Primary Sentence Recognition I, Raw Score Test as shown in Table XIII. As stated before, the factor causing the significant difference cannot be isolated from the range of possible causes.

In the fifth analysis for significant differences between the achievement of the students in the i/t/a group and the Ginn group in the Georgia Summer Reading Program, 1965, the Gates Primary Paragraph Recognition II, Raw Score was used as the criterion measure. The Peabody Raw Score and the Gates Primary Paragraph Recognition I, Raw Score were used as the covariates.

Table XIV, page 45, shows the results of the analysis for significant differences between the achievement of the students in the i/t/a group and the Ginn group when the Gates Primary Paragraph Recognition II, Raw Score was used as the criterion measure with the Peabody Raw Score and the Gates Primary Paragraph Recognition I, Raw Score as the covariates.

TABLE XIV

A COMPARISON OF THE DIFFERENCES IN METHOD, PEABODY RAW SCORE, AND PARAGRAPH RECOGNITION RAW SCORE I BETWEEN THE I/T/A AND GINN GROUPS

Source	df	MS	F
Error	71	877.33	-
Method	1	6.99	0.008
PRS	1	127.73	0.146
PRRS I	1	212.67	0.242

In this analysis the results show that there was no significant difference between the achievement of the students in the i/t/a group and the Ginn group in method, Peabody Raw Score, and the Gates Primary Paragraph Recognition I, Raw Score.

The sixth was the final analysis for significant differences between the achievement of the students in the Marietta, Georgia, system which used the materials incorporating the i/t/a and the students in the Athens, Georgia, system which used the Ginn Basal Reading Materials in the Georgia Summer Reading Program, 1965. In this analysis the Gates Primary Paragraph Recognition II, Raw Score was used as the criterion measure while the Peabody Raw Score and the Gates Primary Paragraph Recognition II, Raw Score were used as the covariates.

Table XV, page 48, shows the results of the analysis for significant differences between the achievement of the students in the two groups when the criterion measure was the Gates Primary Paragraph Recognition II, Raw Score with the Peabody IQ and the Gates Primary Paragraph Recognition I, Raw Score as the covariates.

The results of this final analysis show that there were no significant differences between the achievement of the students in the i/t/a and the Ginn groups in method, Peabody IQ and the Gates Primary Paragraph Recognition I, Raw Score.

TABLE XV

A COMPARISON OF THE DIFFERENCES IN METHOD, PEABODY IQ, AND THE PARAGRAPH RECOGNITION RAW SCORE I BETWEEN THE I/T/A AND GINN GROUPS

Source	df	MS	F
Error	71	874.48	-
Method	1	1.250	0.001
PIQ	1	330.46	0.378
PRRS I	1	160.78	0.184

As measured by the Peabody Picture Vocabulary Test Raw Score and the Peabody IQ Test administered at the beginning of the reading program, the students in both the i/t/a and the Ginn groups appeared to be evenly matched in intelligence.

The results of the pre-tests and post-tests administered to the students showed that both groups made gains in word recognition and paragraph recognition reading achievement during the summer program. While the Ginn group also gained in sentence recognition reading achievement, the i/t/a group appeared to decline. Since several factors could have possibly caused the decline in sentence recognition reading achievement by the i/t/a group, the writer was unable to isolate the primary cause.

As previously stated, the students in the Marietta, Georgia, system used materials incorporating the i/t/a and the students in the Athens, Georgia, system used the Ginn Basal Reading Materials in the Georgia Summer Reading Program, 1965. As measured by the six analyses using the technique of analysis of covariance, there was no significant difference in the achievement of the students in the two groups which can be directly attributed to the reading materials used by the groups.

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This comparative study was initiated as a means of analysis of the effectiveness of the materials (i/t/a) incorporated in one of the new techniques used in teaching reading. The i/t/a is now in use in the United States as a medium to teach reading to students of all ability levels.

In the Georgia Summer Reading Program, 1965, only disabled readers of about average or better intelligence were allowed to participate. Each of the students was administered pre-tests and post-tests in an effort to determine the success or failure of the program.

As a means for determining whether there were any significant differences between the achievement of the students in the Marietta, Georgia, system which used the materials incorporating the i/t/a and the achievement of the students in the Athens, Georgia, system which used the Ginn Basal Reading Materials, six analyses using the statistical technique of analysis of covariance were used. The writer was primarily interested in determining whether any differences between the achievement of the students in the two groups could be directly attributed to the reading materials which the two groups used. No significant differences in the achievement of the students in the two groups

were found which could be attributed to the materials used by the groups in the Georgia Summer Reading Program, 1965.

In evaluating the results of this comparative study several possibilities occur. While every effort was made to adjust for possible individual differences on the part of the students, there was no way to determine and allow for possible differences in the background of successful teaching experience of the teachers. Also, the possibility of differences in the rapport between the teacher and students could influence the achievement of the students.

Because of the awakened interest by educators in teaching reading and the influx of various new media used in the teaching of reading, further research and tests for differences in the achievement of students using these materials is needed. In the Georgia Summer Reading Program, 1965, there were six distinctively different types of materials used in an effort to raise the reading abilities of the participating children. Used in the program were traditional basal reading materials, the Science Research Associates Laboratory Materials, the Programmed Reading Materials published by McGraw-Hill Publishing Company, individualized reading materials, the Language Experience approach developed in San Diego, California, as well as the materials incorporating the i/t/a. It would be

interesting and valuable to make comparative studies of the achievement of the students using each of the materials.

This study was done to compare the achievement of students using two specific types of materials. It was a first step towards the analysis of the application of the new materials now available for use in the teaching of reading. Further studies, including various practical classroom situations are needed to test the effectiveness of all the new materials which can be used in the teaching of reading. Also needed are studies designed to take into account the differences in the background of the teachers and differences in teacher-student rapport in various reading experiments.

Additional studies in the use of i/t/a and possible effects it may have on students are needed. Recommendations for these studies include experiments testing for emotional strains placed on students as they make the transition from i/t/a to traditional orthography. Also needed are experiments designed to test for eye strain on students who had first learned i/t/a and then had to learn to read and write traditional orthography.

BIBLIOGRAPHY

A. BOOKS

Downing, John. The Initial Teaching Alphabet, New York: The MacMillan Company, 1964.

Harrison, Maurice. The Story of the Initial Teaching Alphabet, New York, Toronto, London: Pitman Publishing Corporation, 1964, p. 106.

Smith, Nila Blanton. Reading Instruction for Today's Children, Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1963, pp. 79 - 81.

Strang, McCullough, Traxler. The Improvement of Reading, New York: McGraw-Hill Book Company, 1967, p. 124.

Swales, T. D. "Attainments in Reading and Spelling of Children Who Learned to Read Through the Initial Teaching Alphabet," British Journal of Educational Psychology, 37: 126 - 7, February, 1967.

Tengan, Sadako. "Initial Teaching Alphabet," Experimental Procedures in Reading, The University of Chicago Press, 1965, pp. 61 - 64.

Wert, Neidt, and Ahmann. Statistical Methods in Educational and Psychological Research, New York: Appleton - Century - Crofts, Inc., 1954, pp. 343 - 63.

B. PERIODICALS

Boutwell, William D. "An Easier Way to Read," P. T. A. Magazine, 59: 11 - 13, October, 1964.

_____. "Learning to Read with i/t/a," Senior Scholastic, 86: sup 8 - 9, March 4, 1965.

Cutts, Warren G. "Opinions Differ on the Value of i/t/a," Scholastic Teacher, 10 - 11, March 4, 1965.

BIBLIOGRAPHY (continued)

Downing, John. "How i/t/a Began," Elementary English, 44: 40 - 6, January, 1967.

_____. "Teaching Reading With i/t/a in Britain," Phi Delta Kappan, 45: 322 - 29, April, 1964.

_____. "The i/t/a (Initial Teaching Alphabet) Reading Experiment," The Reading Teacher, 18: 105 - 10, November, 1964.

_____. "What's Wrong With i/t/a?," Phi Delta Kappan, 48: 262 - 6, February, 1967.

"Easy to Read," Times Educational Supplement, 2698: 371, February 3, 1967.

Enstrom, E. A. "Wanted: Unbiased Answers," Elementary English, 44: 47 - 9, January, 1967.

Fry, E. B. "Comparing the Diacritical Marking System, i/t/a, and a Basal Reading Series," Elementary English, 43: 607 - 11, October, 1966.

_____. "First Grade Reading Instruction Using the Diacritical Marking System, Initial Teaching Alphabet, and a Basal Reading Series," The Reading Teacher, 19: 666 - 9, May, 1966.

Georgia Summer Reading Program, 1965, Division of Curriculum, State Department of Education, 1965, pp. 4 - 6.

Gilloly, W. B. "The Promise of i/t/a is a Delusion, With Discussion," Phi Delta Kappan, 47: 545 - 53, June, 1966.

Hayes, R. B. "I/t/a and Three Other Approaches to the Teaching of Reading in First Grades," The Reading Teacher, 19: 627 - 30, May, 1966.

"How Johnny Can Be Taught a New Alphabet, i/t/a," U. S. News, 53: 10, August 20, 1962.

"I/t/a: A Reading Revolution," Library Journal, 90: 50 - 58, November 15, 1965.

BIBLIOGRAPHY (continued)

"Learning to Read: It's Faster With New Alphabet," U. S. News, 53: 10, August 20, 1962.

Mazurkiewicz, A. J. "A Comparison of i/t/a and T. O. Reading Achievement When Methodology is Controlled," Elementary English, 43: 601 - 6, October, 1966.

Peters, M. L. "Influence of Reading Methods on Spelling," British Journal of Educational Psychology, 37: 47 - 53, February, 1967.

"Reading All of a Sudden: Initial Teaching Alphabet," Life, 45 - 6, November 1, 1963.

Riemer, George. "They Still Won't Teach the A. B. C.'s the Modern Way," Ladies Home Journal, 78 - 79, 141, May, 1967.

Rosenberg, S. "I/t/a Seems to be Here to Stay," Times Educational Supplement, 2689: 361, February 3, 1967.

Sheldon, William D. "I/t/a (Initial Teaching Alphabet)," Grade Teacher, 34, 118, 130, October, 1964.

Tanyzer, H. J. and Alpert, H. "Three Different Basal Reading Systems and First Grade Reading," The Reading Teacher, 12: 176 - 80, February, 1959.

"Teaching Britain's i/t/a," Time, 83: 52, April 3, 1964.

The Story of i/t/a, New York: Initial Teaching Alphabet Publications, Inc., 1965, pp. 1 - 5.

"What's Happening in Reading in Great Britain," The Reading Teacher, 12: 176 - 80, February, 1959.

VITA

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