

THE INITIAL TEACHING ALPHABET  
AS USED IN ENGLAND AND  
THE UNITED STATES

BY

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## ABSTRACT

The purposes of this study were to trace the history of the simplified and regularized writing system movement, to enumerate problems encountered in the use of the initial teaching alphabet in teaching beginning reading, and to make suggestions concerning augmented alphabets.

A history of the development of the simplified and regularized writing system was traced from 1500 to 1969, including a history of the development of i.t.a., a contemporary writing system.

A study of i.t.a. research and the results of that research was reported in this paper. Studies included were from Oldham, England; Bethlehem, Pennsylvania; New Brunswick, New Jersey, and Newark, New Jersey.

It was concluded that i.t.a. has been generally proven as a useful medium to use in teaching beginning reading, due largely to the enthusiasm of the teachers using it. Children began reading quickly and with more interest than with traditional methods. However, the transition period, when the children needed to shift from i.t.a. back to the traditional alphabet, was difficult. Sampling and quality of the research plans were questioned.

Further studies were recommended to explore areas not yet covered by research, such as possible social and/or psychological side effects caused by the use of i.t.a. in teaching beginning reading.

CHAPTER I  
INTRODUCTION

Teaching a child to read is the major concern of most primary teachers. They realize how important the ability to read is to the child in his future. They also know how difficult it is to teach every child to read to the best of his ability; yet, they do not understand how a child learns best or easiest. According to Burt:

Reading is by far the most important subject that the young child learns at school. It is also the most difficult to teach... In spite of all the work on eye-movements, speech-habits, brain-centres, and the like, we still do not know what goes on in the brain or mind of the practised reader, nor what are the actual processes by which the beginner first learns to gather meaning from the printed page. (6:vii)\*

Why does a child have difficulty learning to read? Why is reading called "difficult to teach"? Several possibilities have been advanced to answer these questions: (1) the realization that every child learns in a different manner than another, (2) the phonetically irregular spelling of many words in our English language, and (3) the competency of the teacher may be a significant factor in the teaching of reading.

The differences between children have been recapped

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\*Numbers in parentheses refer to numbered references in the bibliography; those after the colon are page numbers.

by Burt:

Owing to the differences in their mental make-up and home backgrounds, different children approach the task of reading in very different ways. One child is harassed by specific difficulties which cause no trouble to another... A child with an uncorrected defect of sight or hearing, with a low I.Q., or a weak mechanical memory, is badly handicapped. But the really important disabilities are far more elusive. Some youngsters, for example, do nearly all their thinking in terms of visual pictures, and are extremely poor in both auditory and kinaesthetic imagery;... Others have little or no visual imagery... Frequently, however, the difficulty is not intellectual, but emotional. The child's first attempts at reading may have been so persistently frustrated by some unrecognized obstruction--an ill-chosen method or an unsuitable type of reading material--that as a result he suffers a kind of mental block, and the very sight of print induces stage-fright. (6:viii)

The phonetically irregular spelling of the English language has come about through the addition of many non-English words into our vocabulary, the great vowel shift, and many other factors. Our English language has been called by Boutwell "a poor carpenter job of trying to nail together sounds from German, Anglo-Saxon, and other tongues with Latin letters. It is a rickety frame for communication." (3:13)

Burt noted:

English in its orthography is more erratic and irregular than any other contemporary language; that is the price we pay for its composite origin--a feature to which so much of its richness and flexibility is due. (6:vii)

Some of the phonetic irregularities which handicap the beginning reader are silent letters and more than one way

of spelling any one sound. Regarding silent letters, "Every letter in our alphabet, from 'a' in 'head' to the 'z' in 'rendezvous,' is sometimes silent." (25:137) As an example of more than one way of spelling a sound, the long "i" sound may be spelled:

a-	{	ais-e ai ay aye	aisle Port Said McKay eyes
e-	{	ei eigh ey eye	seismic height geyser eye
i-	{	i ia i-e ict ie ig igh is	child phial file indict lie sign sigh island
o-	{	oi	choir
u-	{	ui-e uy	guide buy
y-	{	y ye y-e	by bye style (6:9-10)

In all, some 300 spellings have been counted in traditional orthography for the five vowels! (30:80)

The inconsistency of visual patterns in the printings used with beginning readers has presented further difficulty for the student. For example, there are small letters and capital letters which the child must learn to read in

printed materials. They also have been taught to write manuscript small letters and capitals. Other print variations presented early in school life were cursive writing the the reading of italics. The student has had to recognize between 75 and 90 configurations for the 26 ABC's. (30:80)

The child's teacher has been a significant factor in early school life. Her abilities and/or shortcomings have been reflected in the success or failure of her students while learning to read. Burt stated:

A teacher who has a keen and earnest belief in the method he is trying out will nearly always achieve good results; one who has no faith in it, or little interest in the problem, is almost bound to fail.  
(6:viii)

#### General Statement of the Problem

The problem of teaching a child to read is a complex one, requiring many suggestions toward solution. The problems noted in the preceding section represent vast areas of research. This paper attempted to emphasize the second problem, the phonetically irregular spelling of many words in our English language.

Many attempts have been made to bring about the reform of the English language, but these have met with little enthusiasm, and less acceptance. Short of reforming the whole language, there were attempts to formulate an alphabet simply for improving the teaching of beginning reading.

One of these mediums which won favor in England and later in the United States was the Augmented Roman Alphabet, which was renamed the Initial Teaching Alphabet (i.t.a.).

The purposes of this investigation were to trace the history of the simplified and regularized writing system movement, to enumerate problems encountered in the use of i.t.a. in teaching beginning reading, and to make suggestions concerning augmented alphabets.

#### Procedure

The writer attempted to show historical evidence of the development of the simplified and regularized writing system (s.r.w.s.) from 1500 to 1969, including a history of the usage of i.t.a. in schools in England and the United States. Experimental studies using i.t.a. were explored, with results noted. Conclusions were drawn as to the effectiveness of i.t.a. in teaching beginning reading. On the basis of the literature reviewed, recommendations were made regarding further use of i.t.a. and possible changes needed to make it more effective.

#### Delimitation

This paper deals with the history of the simplified and regularized writing system. Emphasis on i.t.a., the currently used s.r.w.s., covers its usefulness for teaching

beginning reading.

The writer has chosen to include in this paper studies with the long-range, wide-sample qualifications. The five-year project in England and the longer-ranged projects in the United States presented a more accurate picture of the situation than other, short-duration studies.

The sources of materials included the Montana State University Library at Bozeman, Montana and the University of Montana Library at Missoula, Montana.

#### Definition of Terms

Initial Teaching Alphabet. The Initial Teaching Alphabet was made up of 44 symbols instead of the conventional 26; each of the 44 symbols represented one, and only one, sound. Twenty-four of the 44 symbols were the traditional symbols; 14 of the augmentations looked very much like two familiar letters joined together. Other special symbols were used to represent the remaining phonemes. See Figure 1, page 7, which shows the 44 symbols of i.t.a.

Printing methods for i.t.a. were the same whether a child was printing i.t.a. with a pencil on his paper or the printer was making a book. Neither was there a variance in shape between the capital and the small letters. According to Chall, "I.t.a. uses only lowercase letters; capitals are simply a larger type size of the lowercase form." (7:38)

The Initial Teaching Alphabet is shown in Figure 1.

<b>æ</b> f <u>a</u> ce	<b>b</b> b <u>e</u> d	<b>c</b> c <u>a</u> t	<b>d</b> d <u>o</u> g	<b>ee</b> k <u>e</u> y	
<b>f</b> f <u>e</u> t	<b>g</b> l <u>e</u> g	<b>h</b> h <u>a</u> t	<b>ie</b> fl <u>y</u>	<b>j</b> j <u>u</u> g	<b>k</b> k <u>e</u> y
<b>l</b> l <u>e</u> tter	<b>m</b> m <u>a</u> n	<b>n</b> n <u>e</u> st	<b>oe</b> o <u>v</u> er	<b>p</b> p <u>e</u> n	<b>r</b> fir <u>e</u>
<b>r</b> r <u>e</u> d	<b>s</b> s <u>p</u> oon	<b>t</b> t <u>r</u> ee	<b>ue</b> u <u>s</u> e	<b>v</b> v <u>o</u> ice	<b>w</b> w <u>i</u> ndow
<b>th</b> th <u>r</u> ee	<b>th</b> th <u>e</u>	<b>sh</b> sh <u>o</u> p	<b>3</b> televis <u>i</u> on	<b>ch</b> ch <u>a</u> ir	
<b>y</b> y <u>e</u> s	<b>z</b> z <u>e</u> bra	<b>s</b> d <u>a</u> isy	<b>wh</b> wh <u>e</u> n	<b>ŋ</b> dr <u>i</u> nk	
<b>a</b> f <u>a</u> ther	<b>au</b> b <u>a</u> ll	<b>a</b> c <u>a</u> p	<b>e</b> e <u>g</u> g	<b>i</b> m <u>i</u> lk	<b>o</b> b <u>o</u> x
<b>u</b> u <u>p</u>	<b>ω</b> b <u>o</u> ok	<b>ω</b> s <u>p</u> oon	<b>ou</b> o <u>u</u> t	<b>oi</b> o <u>i</u> l	

Figure 1. The Initial Teaching Alphabet\*

\*Source of data: (30:78)

When changed into i.t.a., about half of the traditional spellings did not change. Another ten percent of the words needed a silent letter dropped off the end. But 39.25 percent were radically changed when transcribed into i.t.a. Examples included: "ought" (in i.t.a.-"aut"), "once" ("wuns"), "cough" ("cof"), "through" (throo"), and "whole" ("hoel").

Phonetically Regular Spelling. A phonetically regularly spelled word is one in which each phoneme, or "minimum structural unit in the sound system of a language" (7:14) is made by a grapheme, "the minimal visual symbolic unit in a writing system." (7:14) The result of a phonetically regular spelling system was that whenever a child saw a symbol it was read in its own meaningful way. The varied ways of spelling the long sound of "i," as shown on page 3, were eliminated by i.t.a., where the symbol "ie" was consistently used for that sound.

Traditional Orthography. Traditional Orthography (t.o.) is the term applied to our conventional alphabet and everyday print and spelling.

Transition. Transition is the period of time when the child shifts from i.t.a. to traditional orthography. I.t.a.'s creator, Sir James Pitman, believed that the transition could be accomplished more easily if the symbols were generally the same as those in t.o. The letters were

thus formed, with changes affecting the middle or bottom part of the letters, for he felt that the eye skims over the "skyline" of a line of words.

Simplified and Regularized Writing System. To become simplified and regularized, the various spellings for each sound had to be eliminated, leaving just one spelling for each sound. Letters were created to stand for sounds which were spelled by a combination of the traditional letters.

#### Summary

The Initial Teaching Alphabet had been proposed as one answer to the problem of the phonemic-graphemic irregularity of the English language, especially when used to teach beginning reading. A study of the use of i.t.a. symbols in schools in England and the United States may provide the reader with a concise evaluation of the merits of i.t.a. usage as well as problems which have not been solved. The next chapter traced the history of i.t.a. and its predecessors in the two countries.

## CHAPTER II

### HISTORICAL EVIDENCE

In presenting the historical evidence concerning the i.t.a. two areas were considered: (1) the development of the s.r.w.s. alphabet and (2) the use of i.t.a. in schools.

#### Development of the s.r.w.s. Alphabet

Background. The history of i.t.a. began in the 1500's when John Hart published and used a modified alphabet to teach reading. He referred to a "newe manner of writing" (27:393) in his Orthographie of 1569, and discussed it in his manuscript, The Opening of the Unreasonable Writing of Our English Toung in 1551. Sir Thomas Smith, William Bullokar, and Edmund Coote in the sixteenth century, Alexander Gill, Charles Butter and John Wilkins in the seventeenth century, and Benjamin Franklin in the eighteenth century advocated and used modified alphabets for English.

Benjamin Franklin also questioned English spelling irregularity. In 1768 he wrote: "Sometime or other spelling reform must be done, or our writing will become the same with the Chinese as to difficulty of learning and using it." (17:51) In 1779, Franklin worked out his own alphabet and mode of spelling. Because he was a printer, it was easy for him to cast the six additional letters which he felt

were needed for his new alphabet.

A. J. Ellis and Isaac Pitman developed their "Phonotype" in the mid-nineteenth century. Because Isaac Pitman was the grandfather of James Pitman, who later developed the Initial Teaching Alphabet, there was a close family tie between the two men but their systems were largely dissimilar. Isaac Pitman's "Phonotype," also referred to as "Phonotypy" or "Fonotype," was used as a shorthand system. It was later called a more descriptive name, "Stenographic Sound Hand," because it was a shorthand system in which phonetic sounds were applied to symbols. It was described as having "marked a new era in the development of phonetic systems." (22:578)

Pitman's brother, Benn, also demonstrated an interest in this new phonetic system. Realizing that it might be useful in teaching reading, he claimed to have taught 50 persons to read in one month in Swinton, England. He later immigrated to America where interest in phonetics was spreading through Phonetic Councils. Between 1852 and 1860, Pitman Phonotypy was being used to teach beginning reading in ten schools in Waltham, Massachusetts. These programs included a transition to the traditional alphabet during the beginning reading period. Schools in St. Louis, Missouri used a modified alphabet from 1866 to 1886. In 1893, the United States Bureau (now Office) of Education reported that:

Eighteen to 24 months could be saved in learning to read through systems specified and for the first time we hear of attendant gains in the development of personal factors, such as the love of books. (4:8)

By this time, the use of Pitman's First Phonetic Reader had spread to 153 public and ten private schools in Massachusetts, New York, Illinois, St. Louis and elsewhere.

The International Phonetic Association, founded in 1886, followed a suggestion made by Otto Jespersen and established an alphabet in 1888 which was designed to be international and applicable to all languages. From this came a series of readers in Simplified Spelling: A Ferst Reeder in Simplified Speling, A Sekond Reeder, and Jinglz and Storiz. These were used in English Infant Schools in the early 1900's with glowing reports of success.

Between 1870 and 1920 several Americans developed alphabets, prepared reading books and taught reading experimentally using books printed in their respective alphabets. Among these systems were the Leigh, Shearer, Funk and Wagnall, and Ward systems. (27:375)

George Bernard Shaw showed a marked interest in revamping the alphabet. He believed that a 40-letter alphabet, including 16 vowels, would be a "fit British alphabet." (2:163) Each letter of his proposed alphabet should be written with one stroke, like a shorthand symbol. He was convinced that the time saved would be great, using

two symbols instead of six for a word such as "though." He offered to leave his fortune to any organization who would volunteer to take up his project. An alphabet called the Shaw Alphabet was subsequently written, following a contest to which 476 persons submitted alphabets. Four co-winners were selected, and one alphabet was chosen to carry out the alphabet clauses of Shaw's will.

Shaw's wish, according to Pitman, was to augment the Roman alphabet system, rather than replace it, just as Arabic numerals augment rather than replace Roman numerals. The symbols looked roughly like musical symbols. It was thought that they would save one-third of the time spent writing. Bainbridge pointed out:

The alphabet has not been endorsed by any phoneticians or similar professional group; it is not being taught in any school, nor, as far as anyone knows, is there any plan to do so; and no funds exist to win it more friends. (2:172)

In 1969 a quarterly journal was being published using the Shavian Alphabet. It was called the Shaw Script and had about 100 subscribers.

In 1925, W. H. Winch published a monograph on which he had spent 20 years of work. It told of his expanded alphabet which was called "Phonoscript." To Arthur I. Gates, he "practically admitted... that he got as good results as he reported in his monograph only by virtue of very diligent efforts of devoted teachers." (27:394)

In 1940 the Simplified Spelling Society brought forth a scheme called "New Spelling" or "Nue Speling." World War II affected this system because of the acute paper shortage. Several books were planned; only the first one, Dhe Litl Red Hen, was published. Several attempts were made to get a Simplified Spelling Bill through Parliament. The attempts failed, but three decisions were made by the Simplified Spelling Society which affected i.t.a. later. These were listed by Harrison:

The first was that spelling reform as a general issue was to be relegated into the background, and the Society's efforts were to be concentrated on the educational aim of teaching children to read. Secondly, that the next experiment in schools should not collapse for want of books... The third decision was that the experiment should be undertaken by a body of national repute, not directly interested in the results, as a problem of scientific research to be proved or disproved beyond question, with appropriate scientific controls and comparisons among children of similar type and from the same backgrounds taught by traditional methods. (15:92)

Contemporary i.t.a. In 1959 the then recently knighted Sir James Pitman invented the Augmented Roman Alphabet. He called it a "reformed" Roman alphabet. He stressed that it was not a design for reforming spelling, but a device for teaching reading, to be used for initial teaching only. It was "a teacher's tool, a grading of the material for the early stages of reading, one to be left behind and forgotten, when it achieved its teaching purpose." (15:106) This alphabet,

which was renamed i.t.a., established the usage of one fixed form for each character and the digraphs are printed as one letter both in their spacing and their shaping. Because of the failure by some educators to grasp the basic essence of i.t.a., the Phi Delta Kappan journal restated that i.t.a. is a writing system. It is not a system for teaching.

It is a system of ink marks on paper to represent a primary system of sounds in air which is spoken language... Methods of teaching and the design of materials may ultimately be influenced by a change of writing systems such as i.t.a., but it is vital to understand that i.t.a. is just a writing-system, not a teaching system. (12:262)

#### Use of i.t.a. in Schools

The beginning of the use of i.t.a. to teach reading in schools in England took place in 1961. These experiments were conducted by the Reading Research Unit in London and also by psychologists in England and Scotland. In 1964, 233 schools began the use of i.t.a. In 1965, four years after beginning with i.t.a., 2000 schools were included in the experiment.

I.t.a. came to the United States through Mr. Philip Hilaire, who in 1959 was the reading consultant to the United States Air Force Dependents' Schools in England.

After analyzing Pitman's work, Mr. Hilaire began rocketing letters back to his hometown, Bethlehem, Pennsylvania, telling all about the new wonder alphabet. During his summer leave in 1961,

Mr. Hilaire brought to Bethlehem Pitman's alphabet, and the designs for an experiment planned for England for the fall. (25:139)

He showed his findings to Dr. Rebecca Stewart, Director of Elementary Education in the Bethlehem area Public Schools.

She noted:

There must be a time bomb in this alphabet. I'd want to see the English results before endorsing it here. My biggest question is, once they've learned the new symbols, can they be weaned away from them and learn to read and spell in everyday ABC's? (25:138)

Reports flown to Dr. Stewart in the following months indicated that English children were having no "re-entry" problems. In addition, they were said to be spelling better than the t.o. children. Dr. Stewart asked her Superintendent, Dr. Charles E. Chaffee whether a test might be run in Bethlehem. Agreement was given by the elementary school principals, the Education Committee and the school board. The experiment began in September, 1963.

Since 1963, other cities in the United States have begun the use of i.t.a. for teaching reading. These cities included: Lompoc, California; St. Cloud, Minnesota; Chicago, Illinois; Cleveland and Akron, Ohio; and New York City. By 1968, cities in every state, except South Dakota, were using i.t.a. In 15,000 American schools approximately 125,000 first graders were being taught to read in i.t.a. materials. (30:78)

Development of Texts. In England, the Janet and John Series, already in use in more British schools than any other series, was transliterated into the i.t.a. for the experimental group. The publisher was James Nisbet and Company.

In the United States, an entire series of books was quickly produced. Initial Teaching Alphabet Publications, Incorporated, a subsidiary of Pitman Publishing Company, signed the authors, Dr. Albert J. Mazurkiewicz and Dr. Harold J. Tanyzer to co-author their reading series in March, 1963. The books were ready for schools in September. The first printings of these texts were not in hard cover, due to the time element involved. In 1964 they were printed in hard covers, except the first three readers which are paperback as are most t.o. pre-primers.

In content and organization, these modified alphabet readers made history. There was no Dick-and-Jane family, but rather, a group of unrelated stories about "such unorthodox subjects as piracy, space travel, baseball, a cattle roundup, deep-sea diving, and children's problems with their parents." (18:67) Names such as Pedro, O'Toole, Finnigan's Wife, appeared. More than half the stories were from Humpty Dumpty's Magazine; many were adaptations of classics such as "The Elves and the Shoemaker." The books contained no poetry. Illustrations were unconventional in that they were bold, two-color pictures. The vice-president of I.T.A. Publications,

Margaret Bushnell, pointed out: "You don't need so much realism in books in i.t.a. because the children can read the words. The vocabulary is much larger, because with i.t.a. any word a child can say, he can read and write." (29:76) I.t.a. books have run-on lines, instead of ending each line with the end of a sentence. The appearance of dark-skinned children in six of the 100 stories showed a trend toward multi-racial understanding.

The Downing Readers, published in England, often served as supplementary readers. Workbooks had been developed to accompany the Early-to-Read Program for each stage in the reading readiness through the transition period. Supplementary aids included: (1) My Alphabet Book, (2) My Number Book, (3) i.t.a. Word Building Kit, (4) Sound-Symbol Cards, (5) Resource Kit, (6) Handbook for Writing and Spelling, (7) i.t.a. for Teachers, (8) a film, The Forty Sounds of English and a Book is to Read, and (9) Vocabulary Cards. Supplementary books were available from several publishers in the United States in both paperback and hard-bound editions.

#### Summary

It was evident that much effort has been devoted to the establishment of a modified alphabet for teaching reading and thus correcting the inconsistencies in the

English language. I.t.a. became the most widely used and researched of the s.r.w.s. It appeared that educators who believed that i.t.a. was a valuable method for teaching reading conducted research to prove their theories. The chapters which follow described the study made in England and the major studies in the United States.

CHAPTER III  
THE EXPERIMENTAL STUDY IN ENGLAND  
BY LONDON UNIVERSITY

In order to understand the contribution of i.t.a. to the teaching of beginning reading it was well to review research that had been conducted in England and the United States. In this chapter this writer has presented the study in England as conducted by the Reading Research Unit of London University.

The Experimental Design

In 1961, committees from five counties in England began to use i.t.a. in their schools. Five schools were persuaded to join the scheme, all geographically located near Oldham, England. A pamphlet explaining i.t.a. had been published by the Institute of Education in association with the National Foundation of Education Research. It stated that the chief object of the research was to investigate the fundamental factor of orthography in reading, not merely to validate i.t.a. It was entitled Some reasons why we are initiating an investigation into the early stages of learning to read, when the matter to be read is printed in a special form alleged to be easy to learn and leading easily to a full reading skill. (15:115)

The research officer, called in by the Reading Research

Unit of the London Institute of Education, was Mr. John Downing. He was a psychologist and had a varied teaching background. He is said to have approached the job of evaluating the experiment as a neutral inquirer.

His first tasks involved routine organizational duties. Infant schools, where the headteacher and the class teacher volunteered, were the only schools accepted for beginning i.t.a. experiments. Parental consent was obtained for each student participating in the project. Every school scheduled to use i.t.a. was matched with a control school. The samples were built up in stages, with a few hundred children the first year, increasing to about 2,500 subjects in each group near the end of the five year study.

Every precaution was taken to see that conditions in the two sets of schools were strictly comparable. A deliberate attempt was made to equalize the Hawthorne effect in the experimental and control groups. According to Downing:

The linguistic stimuli presented to the children in i.t.a. were the same as those presented to the t.o. students except for the way in which those stimuli were printed in their reading materials. By using the same eclectic basal readers ("Janet and John") printed in i.t.a. for the experimental classes and in t.o. for the control classes, parallel linguistic content and teaching methodology was assured, and thus any differences in attainment between the two groups must be the result only of the change in the writing system in which the books were printed.  
(9:641)

The schools represented various types, but generally

the children came from working-class background where most homes had few books. Infant school students were admitted at the beginning of the year in which they turned five; thus the ages of the children beginning the experiment ranged from four years one month through approximately five years.

Concerning procedures, the following were outlined by Mr. Downing. Lectures were given to the teachers. Parents and children received informative pamphlets. All children were tested on entrance into school, their intelligence quotients were established, and records were made containing pertinent home and background information. Forms were distributed to teachers which would show when the child started and finished each Janet and John book, as well as how many days the child had been absent. Teachers were told to go on teaching as they always had, stressing look-say or phonics.

Some of the problems encountered were scarcity of books, building programs in which schools were involved, and sampling procedures. The supply of reading materials at home, at school and in the child's surroundings was limited due to the limited number of books which had been transliterated into the new alphabet. It did not match the supply available to the control group. Supplementary books for use in the schools were not readily available until later in the experiment.

Four of the five buildings where the study was being conducted were undergoing building changes. The fifth

school withstood the deluge of 4,000 visitors during the first two years of the experiment, 1961-1963.

Sampling could not be random because both the experimental and control group had to be composed of children whose parents had agreed to allow them to be used for the research. Sampling was not representative of the total school population.

### Results of the Study

From the experiment with i.t.a. in the five counties in England, Harrison collected data and reported it from Oldham, England. Results of that study have been given below.

Harrison used the following scale to compare progress between the i.t.a. and t.o. pupils:

1. Children reading Here We Go;
2. Children reading Janet and John, Book I or Off to Play;
3. Children reading Out and About;
4. Children reading Janet and John, Book II or I Went Walking;
5. Children reading Janet and John, Book III or Through the Garden Gate;
6. Children reading Janet and John, Book IV or I Know a Story; (beginning transition to t.o.)
7. Children reading Once Upon a Time;

8. Scheme completed. This stage included those children who had read all the six or seven books of the series required in their school. At this stage all were reading conventional print. (15:127)

A comparison of progress is shown in Figure 2.

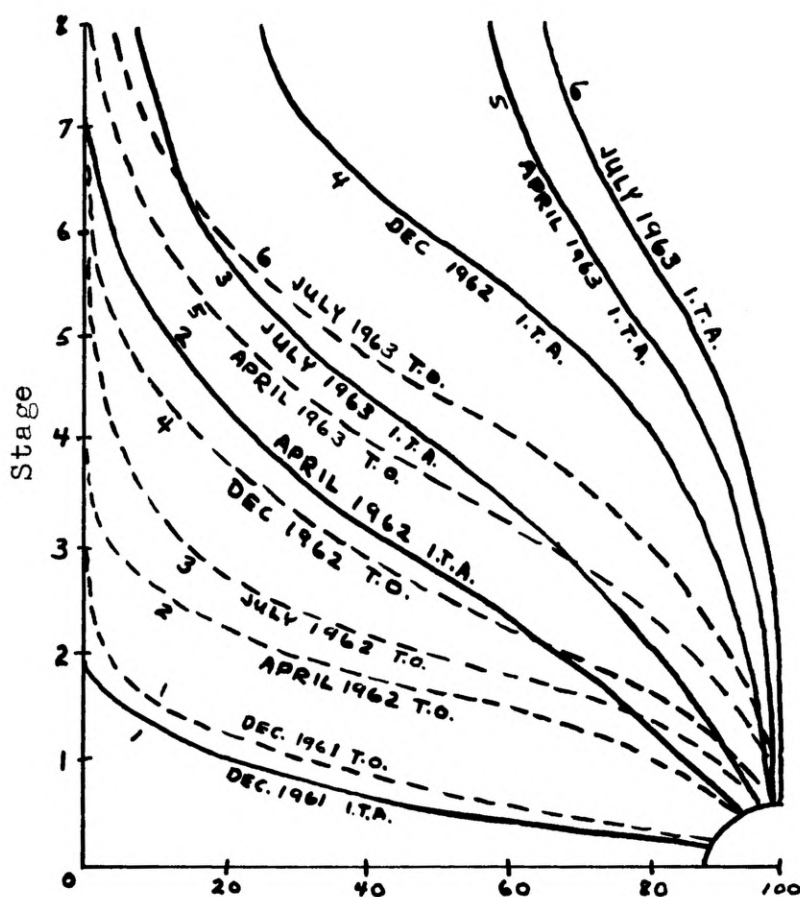


Figure 2. Percentage of Pupils Having Reached or Passed Stage\*

\*Source of data: (15:136)

The rapid rate of progress of the experimental children is shown in Figure 2. The i.t.a. group was shown with solid lines, t.o. with broken lines. After three terms, September 1961 through July 1962, a significant percentage of the i.t.a. group had completed the scheme (7.3%), while only 3.9 percent of the t.o. children were even half-way through. By the end of the fourth term, December 1962, more than a quarter of the experimental children had completed the course, and less than one in twenty of the t.o. children were at a level comparable to stage five. In other words, one in four i.t.a. children could read anything in t.o. books which they cared to read, while the t.o. children were still struggling with very simple sentences. By the end of the fifth term, April 1963, more than half of the experimental children had made the transition to ordinary print and were reading widely. At that date, only two of the 259 t.o. children were in the same position. After two complete school years, more than 90 percent of the t.o. children had not reached a level comparable to stage 7, while more than two-thirds of the i.t.a. children had done so and almost two-thirds had completed the whole scheme.

Only in December 1961 were the solid and broken lines closely together. By the end of the second term, the i.t.a. children were well ahead. The third-term curve of the i.t.a. children approximated that of the t.o. children after six terms, pointing out that the i.t.a. children

were a year ahead at the end of the first year. Because they finished the basic books more quickly, the i.t.a. children read scores of books in simplified spelling before the control group finished their basic readers.

In 1962 the original five infant schools using i.t.a. had grown to thirteen. The latter schools (including almost four times the enrollment) were compared with figures from the beginning experimental schools, which attempted to prove that the first experiment's scores were repeatable and in line with the second experiment.

TABLE 1. FIRST TERM RESULTS FROM TWO SUCCESSIVE EXPERIMENTAL POPULATIONS USING I.T.A. FOR BEGINNING READING\*

	Beginners of 1961 December 1961 150 children		Beginners of 1962 December 1962 509 children	
Stage	Percentage at stage	Percentage having reached or passed stage	Percentage at stage	Percentage having reached or passed stage
0	77.3	100.0	65.4	100.0
1	22.7	22.7	17.3	34.6
2	--	--	13.0	17.3
3	--	--	2.9	4.3
4	--	--	1.4	1.4

\*Source of data: (15:139)

TABLE 2. SECOND TERM RESULTS FROM TWO SUCCESSIVE EXPERIMENTAL POPULATIONS USING I.T.A. FOR BEGINNING READING\*

	April 1962 152 children		April 1963 547 children	
	0	17.1	100.0	20.8
1	19.1	82.9	16.8	79.2
2	22.4	63.8	26.3	62.4
3	12.5	41.4	11.2	36.1
4	15.8	28.9	12.6	24.9
5	9.9	13.1	8.0	12.3
6	2.0	3.2	2.4	4.3
7	0.6	1.2	1.7	1.9
8	0.6	0.6	0.2	0.2

\*Source of data: (15:139)

TABLE 3. THIRD TERM RESULTS FROM TWO SUCCESSIVE EXPERIMENTAL POPULATIONS USING I.T.A. FOR BEGINNING READING#

	July 1962 150 children		July 1963 538 children	
	0	4.7	100.0	9.8
1	13.3	95.3	10.4	90.2
2	14.7	82.0	18.6	79.8
3	15.4	67.3	15.8	61.2
4	18.0	51.9	19.7	45.4
5	15.3	33.9	9.5	25.7
6	6.0	18.6	6.3	16.2
7	5.3	12.6	3.2	9.9
8	7.3	7.3	6.7	6.7

#Source of data: (15:140)

The results shown in Table 1 indicated that the 1962 beginners were ahead of the 1961 beginners in December. At the end of the second and third terms, as shown in Tables 2 and 3, the 1962 beginners lagged behind the 1961 beginners. This information is illustrated in Figure 3.

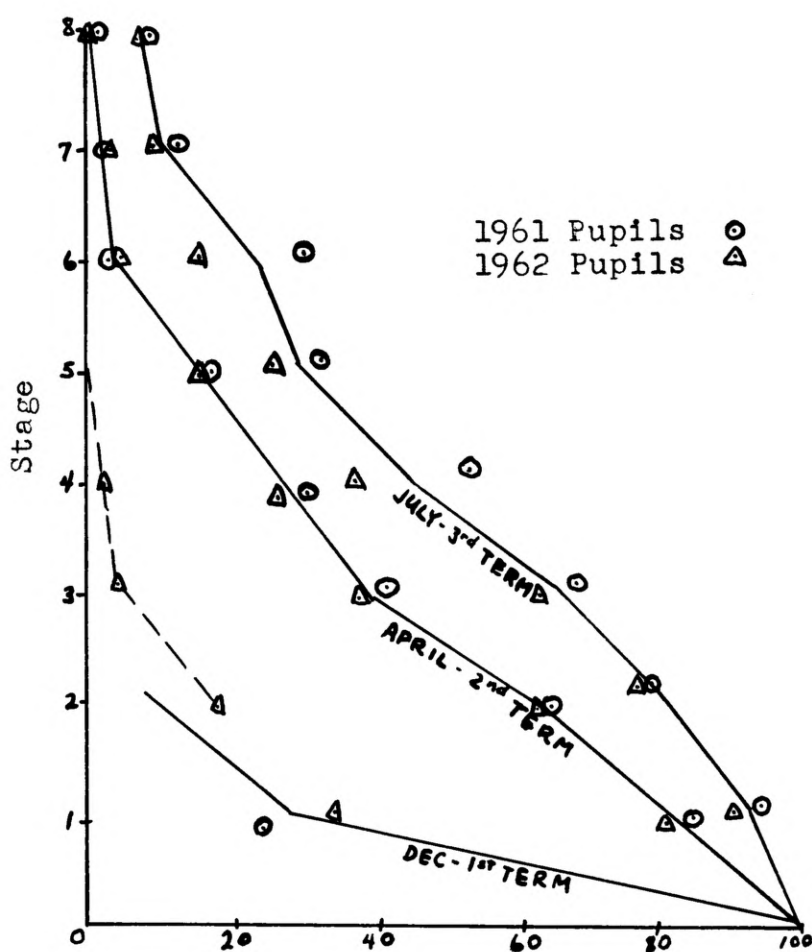


Figure 3. Percentage of Pupils Having Reached or Passed Stage\*\*

\*\*Source of data: (15:141)

Figure 3 showed how closely the achievement of the 1962 entrants paralleled that of the 1961 entrants. The broken line referred to the 17.3 percent of 1962 students who outran the first entrants. The second-term curves were almost identical and there was very close approximation in the third term.

The quicker start with the second group of teachers was probably due to the growing experience of teachers with the new medium. Some who were hesitant to give books to children in the first term of school in 1961, did so in 1962. Some saw no point in taking the faster readers through the whole set of books and supplementary books, so they took them through selected books suited to the child's ability to progress.

Oldham, England had 37 infant schools. In July 1963, 35 headteachers had requisitioned books in i.t.a. for the 1963-1964 school year. From two schools and one clinic using i.t.a. remedially, the number increased to 57 schools and clinics.

Results of the Southgate Group Reading Test 1B, given in July 1962, showed the control group to have a mean reading age of six years, one month, compared with their mean chronological age of five years, six months. The mean chronological age of the experimental class was five years, one month, and their mean reading age was six years, three months. Both

the t.o. and the i.t.a. groups took the test in t.o., thus giving a handicap to the i.t.a. group. The older, traditionally taught group was seven months ahead of normal expectation, but the younger experimental group was 14 months ahead on the same test, printed with an alphabet and in a spelling which they had never studied. The same test, Section 1C, was given again in December 1962, also in t.o. The average chronological age had advanced to five years, six months; the average reading age had advanced to six years, eight months, still a gain of fourteen months.

Chall reported that in 1963 the i.t.a. group was still ahead:

After two years a test of oral word recognition given in t.o. showed the experimental group to be a year ahead of the control group. The average reading age of the i.t.a.-trained children was eight years, four months, as compared with the control group average of seven years, four months; both groups averaged a chronological age of seven years, one month. Thus, a conservative report of i.t.a.'s effectiveness for the average pupil, according to Downing, is that it saves one year in learning to read t.o. (7:121)

During the years 1963 through 1966, very little was published on i.t.a. Very few articles described progress with i.t.a., but the next major publicity appeared in 1967-8 when the research was completed in England and a full report was made by the Reading Research Unit of London University. The methodology, results and conclusions of the i.t.a.

experiment had been reviewed by twelve independent judges and published in The i.t.a. Symposium, National Foundation of Educational Research, publisher.

The judges of The i.t.a. Symposium had been supplied with a detailed account of the research procedures, but they did not appear to agree with each other over the validity of the research methods. Diack criticized "the extreme thinness of the research" and said that he "should have hoped for something more fundamental." (9:642) Burt, on the other hand, stated "We know now far more about the processes of reading and of learning to read than we did before the experiments were undertaken." (9:642) However, Burt criticized the methods of analysis of data. Holmes, too, noted "'certain limitations' on the generalizability of the findings, but stated that, in the research, the 'step-by-step analysis is thorough and cautious and concluding remarks are conservative.'" (9:642) Artley judged that "the Downing report presents the results of a definitive and completely objective study of the value of the Initial Teaching Alphabet in early reading." (9:642)

Wall reviewed all the eleven independent judgments of the Symposium, and his overview included both approval and criticism.

Most of the contributors pay a well deserved tribute to Downing for his attempt to control these variables as far as possible and applaud the caution with which he presents his results. Certain criticisms

are, however, sustained and do limit the generalizability of the results. (9:642)

In England the conclusions of the judges concerning the experiment were threefold. First, the irregularity of the English language caused difficulty for the beginning reader. According to Downing:

'The traditional orthography of English is a serious cause of difficulty in the early stages of learning to read and write.' For example, by the end of the first year of schooling, objective tests showed that T.O. students had a reading vocabulary in T.O. which was less than half that of i.t.a. students tested by parallel i.t.a. versions of the same tests. (9:642)

The second conclusion of the judges regarding the value of i.t.a. in teaching beginning reading was:

'I.t.a. as an example of a transitional writing-system for beginning reading... in English generally produces superior results in T.O. reading... by the end of the third year of school.' For example, on word recognition tests in T.O., i.t.a. students are superior to non-i.t.a. students by about five months of reading age at the end of the third year of school. (9:643)

The third conclusion was that "the success of i.t.a. in improving T.O. literary skills occurs in spite of an important setback in the growth of these basic skills at the stage of transition from i.t.a. to T.O." (9:643)

Transition is not as easily effected as it was hoped. Sir James Pitman had thought children would shift effortlessly from the augmented alphabet to the regular alphabet when

they finished the initial stages of learning to read. Some teachers suggested that the transition was smooth and easy:

It just happens, suddenly. For some it takes six months and for others as much as 18 months. We are organized with books in i.t.a. and traditional English. Children live in a sea of regular English-- on the telly and in the stores. Transition is no problem. (5:19)

Other persons were not so optimistic:

Mr. Maurice Harrison advocates, in a circular to his schools in Oldham, that children should read all the i.t.a. books available and then, one day, they would pick up a book in traditional print and just go on reading. This is a rather different picture from the one which I saw frequently, of children finished Book 4 in i.t.a. and then slogging through the same book again in traditional print. (26:74)

Test results as reported in The i.t.a. Symposium showed that:

i.t.a. students from about mid-second year until about mid-third year do not read t.o. as well as they read i.t.a. a few weeks or even months previously. They read t.o. as well as students who have had only t.o. from the beginning, but the remarkable advantage of i.t.a. reading by i.t.a. students over the t.o. reading of the t.o. students is lost at this stage. By the end of the third year the i.t.a. students are ahead again in reading t.o., but nowhere near as far ahead as they were when reading i.t.a. (10:849)

Concerning the number of failures in the beginning reading period, Chall stated in her book Learning to Read: The Great Debate, that the number of failures is comparable

to the number of failures with other beginning reading methods. She says:

We can also infer some lack of success from Downing's report revealing that after two years, 15 percent of the i.t.a.-trained children had not yet been transferred to t.o.; this figure recalls the number of failures (10-15 percent) in grades above the first revealed by various surveys made in the United States of children taught without modified alphabets. (7:124)

Individual teachers in England who used i.t.a. were generally enthusiastic about it. After a year with i.t.a., reverting to t.o. for a year in an effort to prove i.t.a.'s effectiveness, Sister Mary Finbarr of St. Mary's Roman Catholic Infant Schools, one of the original five schools in the study, wrote:

One can safely say that these children (the second year i.t.a. class) are really a year in advance of the normal standard achieved by this age group. The amount of reading accomplished per week is noticeably far greater. The mechanics of reading being over at a much earlier stage, the children are now reading for comprehension and enjoyment. Reading is for them a pleasurable occupation, not a task to be endured... The general attitude of the children in the i.t.a. group is most striking. They show more aptitude towards work, they appear to have an uninhibited proficiency about them, to be more purposeful in the way they go about all activities and they display a great confidence and independence. We are all now quite convinced of the great benefits derived from teaching with the new method. Those directly concerned would have no other. (15:141)

St. Mary's Infant School used i.t.a. again the next year.

### Summary

The Reading Research Unit of London University conducted a study of i.t.a.'s influence on teaching beginning reading over a period of five years, 1961-1966. Mr. John Downing headed the research team and enlisted the support of five schools in England to cooperate by using i.t.a. in their Infant Schools.

The results of the study were published in numerous magazines, culminating with the publication of the book, The i.t.a. Symposium, in 1967. The conclusions of the judges for the Symposium were: (1) the irregularity of the English language caused difficulty for the beginning reader, (2) i.t.a. when used to teach beginning reading generally produces superior results, and (3) i.t.a. is successful in spite of the setback at the stage of transition. Criticism has been expressed regarding the validity of the research methods. However, the effectiveness of the use of i.t.a. was generally agreed upon, especially by the individual teachers who used it in their classrooms.

The research carried on in the United States was similar in many respects to that in England. The experimental use of i.t.a. in the United States was presented in Chapter IV.

## CHAPTER IV

## THE USE OF I.T.A. IN THE UNITED STATES

The use of i.t.a. in the United States was primarily investigated at Bethlehem, Pennsylvania. Two other studies, which received less publicity, were conducted by Rutgers University, New Brunswick, New Jersey, and by the United States Office of Education in New Jersey. There have been other studies but these three seemed to offer the best available data. Results of each of the studies were included immediately after each study.

## I.t.a. in Bethlehem, Pennsylvania

Fifteen first grade classes in Bethlehem, Pennsylvania began use of i.t.a. in the United States in 1963. Two-thirds of the Bethlehem first graders received instruction in a language arts centered co-basal reading program; one-third used i.t.a. The instructional program included a multi-basal orientation, and included the following elements for each of the experimental populations:

1. A language experience appropriate for beginning reading instruction.
2. A basal reader nucleus.
3. The introduction of letters as characters according to their frequency of sound occurrence for word recognition activities.

4. A variety of workbook and supplementary skill materials as determined by pupil need.

5. Wide supplementary reading, both publishers' editions and child-written books.

6. Writing as an aid to the development of word analysis skill.

7. An eclectic word recognition program, which followed the sequence of audio-to-visual-to-kinaesthetic learning.

8. Phoneme-grapheme relationships in written activities, followed by the frequency of sound occurrence.

9. Guided purposeful reading activities, which included readiness, silent or oral reading, word analysis, and comprehension skill teaching.

10. Basic curriculum of the school system was followed in each case with scheduled language arts activities.

11. The Hawthorne effect was included in the t.o. population by emphasizing that this population was experimental, by suggesting competition, by scheduling visits to classrooms, etc. The Hawthorne effect was operating. Children were aware of the excitement, aware of special attention being given their needs. (19:607)

Chall pointed out that this program was significantly different from that used in England:

Although the English experiment proposed only a change in medium, not method, the Bethlehem

experiment innovates in method as well as in medium by putting greater stress on early learning of the alphabet and phonics. It also calls for the children to do more writing, and it has a heavier vocabulary load. (7:39)

Forty percent of those in the i.t.a. group were from low socio-economic areas, deficient in both verbal and experiential backgrounds. This group was not representative of the distribution of socio-economic position in the entire school district.

Dr. Albert Mazurkiewicz, Director of the Reading and Study Clinic and the i.t.a. Studies Center at LeHigh University, conducted research on i.t.a. and t.o. reading achievement at Bethlehem. The comparison of achievement after five months of instruction with i.t.a. is shown in Table 4.

TABLE 4. FIFTH MONTH INSTRUCTIONAL LEVELS OF RANDOM SAMPLE POPULATIONS AS MEASURED BY BOTEL READING INVENTORY PRINTED IN MEDIUM USED BY EACH POPULATION\*

Reader Level	Percentage at Level	
	i.t.a. (n = 35)	t.o. (n = 35)
4	5.7	2.9
3-2	14.3	.0
3-1	11.4	.0
2-2	2.9	.0
2-1	8.6	.0
1	17.1	.0
P	8.6	17.1
PP	5.7	42.8
Readiness	25.7	37.1

\* Source of data: (19:608)

According to Table 4, a noticeable gap was shown between the first reader and the fourth reader achievement of the t.o. group. This suggested that t.o., at this point, had an inhibiting effect on achievement, which only a small percentage of even the brightest children could overcome.

The Stanford Achievement Test, Form W, was used to test both groups. It was also given after five months of i.t.a. instruction. Only on the subtest of Word Reading was a significant advantage for i.t.a. shown. Advantage for the i.t.a. instructed children was not significant on Word Study Skills, Paragraph Meaning, or Vocabulary. The researcher, Dr. Mazurkiewicz, felt that these areas of learning may be highly related and may have merely reflected the influence of the child's environment on these areas of achievement.

A test to determine reading achievement on a t.o. standard after 110 days of instruction was given. Table 5 shows the results. According to Table 5 the advantage was seen for an i.t.a.-taught population on a t.o. measure of Word Meaning, even though only 54% of the i.t.a. population had made transition to t.o. No significant difference was shown between i.t.a.-taught and t.o.-taught populations in Paragraph Meaning and Word Study Skills subtests when measured on the t.o. standard.

TABLE 5. MEANS, STANDARD DEVIATIONS AND z SCORES OF MATCHED PAIRS ON THE T.O. FORM OF THE STANFORD ACHIEVEMENT TEST, FORM X\*

Stanford Achieve. Primary I, Form X	ita (n = 118)		to (n = 118)		z
	M	SD	M	SD	
Word Meaning	25.33	6.45	23.47	6.50	2.37*
Paragraph Meaning	23.81	9.64	23.42	8.93	0.35
Word Study	23.08	5.38	24.30	5.99	-1.95+
Vocabulary	41.14	7.85	41.89	8.95	-0.92

\*Significant at or beyond the 5% level.

+Approaching significance at the 5% level.

Negative z scores indicate significance is in favor of the t.o. population.

Note: 64 of the 118 i.t.a. members of the pairs had made formal transition at the time of this testing.

\*Source of data: (19:610)

After using the materials for a year in Bethlehem, Dr. Rebecca Stewart compiled tabulations of results. Tests given in May 1964 and September 1964 compared the total reading grade equivalent scores obtained by matched pairs of t.o. and i.t.a. children. According to Table 6, neither population had lost during the summer a substantial portion of the reading achievement previously gained. Stewart pointed out that the i.t.a. population improved in reading skill by an increase of 6% between the 3.5 and 3.9 grade interval. "Three percent of the t.o. population moved to the 3.5-3.9 interval, and 4% to the 3.0-3.4 interval." (28:661) Note that not one child failed to learn to read

in i.t.a., "although normally 10-15% of children in first grade turn out to be 'non-readers'." (16:76)

TABLE 6. A COMPARISON OF TOTAL READING GRADE EQUIVALENT SCORES OBTAINED BY THE MATCHED PAIRS ON THE CALIFORNIA READING TEST (LOWER PRIMARY), FORM W, MAY, 1964, & FORM X, SEPTEMBER, 1964\*

Total Reading Grade Equivalent Scores	i.t.a.		t.o.	
	Form W May '64 %	Form X Sept. '64 %	Form W May '64 %	Form X Sept. '64 %
4.0+	1.57	1.07	-	-
3.5-3.9	4.07	10.75	2.37	5.37
3.0-3.4	24.17	21.50	8.57	12.90
2.5-2.9	37.07	35.48	28.67	20.43
2.0-2.4	24.07	22.58	27.07	29.03
1.5-1.9	9.07	8.60	21.07	21.50
1.0-1.4	-	-	11.67	10.75

May 1964 - n = 114 matched pairs  
September 1964 - n = 93 matched pairs

\*Source of data: (28:661)

At the beginning of their second year of education, 15 percent began developmental reading in the 3-1 reader with emphasis on thinking and comprehension skills; 20 percent of the i.t.a. program were reading in books 5, 6, and 7, and approaching or finishing formal transition in books 6 and 7; 65 percent were in developmental reading at the 2-2 level. Students were doing typical third grade work, such as distinguishing long and short vowels,

recognizing consonants in the beginning, medial and final position.

In May the California Reading Test, Upper Primary, was given. The Word Recognition section of the test showed a significant difference in favor of the i.t.a. population of 3.30 (significant at the 1% level). There was no significant difference in comprehension.

The instructional level of the second grade in April 1966 is shown on Table 7.

TABLE 7. INSTRUCTIONAL LEVELS ACHIEVED BY MATCHED SAMPLES OF THE I.T.A. AND T.O., 1964-1965 POPULATIONS FROM THE APRIL 15, 1966 SURVEY#

t.o. Reader Level	i.t.a. n = 100 Percentage	t.o. n = 101 Percentage
4-2	2.0	-
4-1	13.9	5.9
3-2	24.7	21.8
3-1	29.7	39.7
2-2	24.7	17.8
2-1	4.0	14.9
	<u>99.0</u>	Total <u>100.0</u>
i.t.a. Reader Level		
2-2 (Book 5)	1.0	
	Total <u>100.0</u>	

#Source of data: (20:727)

According to Table 7, the larger percentage of t.o. children were reading on the 3-1 level, another 39% were at the two levels of 2-2 and 3-2 with none reading above 4-1. The i.t.a. children were concentrated in the 3-1 level also, with another 40% of the group reading at the 3-2 to 4-2 level.

Mazurkiewicz summarized his findings on beginning reading with the following statements:

Children using i.t.a. materials: (1) advance more rapidly in reading and writing experience; achieve superior reading skill at an earlier time; read more widely;... and have no difficulty in making a reading transition to traditional materials when they are allowed to develop sufficient confidence and efficiency,... (2) achieve word recognition in t.o. at the end of the first and second years that is significantly better than that of t.o.-taught children, but this difference is not retained at the end of the third year, (3) have higher comprehension as indicated by instructional levels and reader level achievement in all years. Standardized test achievement in comprehension shows that the i.t.a. population does not differ from the t.o. population. (4) They have shown no deleterious effects on such measures as rate of reading or accuracy of reading, suggesting that the i.t.a. and t.o. procedure establishes no negative characteristics, no hindrances to later achievement. (20:728)

Due to the heavier vocabulary load, the stress on early learning of the alphabet and phonics, and the emphasis on writing, Chall suggested that:

should the American i.t.a. demonstration achieve better results than conventional American basal-reader programs, we must still ask whether i.t.a. or the changes in method account for the difference. (7:39)

### I.t.a. Research Conducted by Rutgers University

Dr. Edward B. Fry, Director of the Reading Center at Rutgers University, New Brunswick, New Jersey, studied the use of three systems over a period of three years. Dr. Fry compared i.t.a., the Diacritical Marking System, and t.o. using 21 first grades for the research.

The Diacritical Marking System (D.M.S.) was "a new system developed by the author partly as a control for the 'Hawthorne effect' that might be present if the new i.t.a. were tested only against the old t.o." (14:357) Diacritical markings were superimposed in the Sheldon Readers which were published by the Allyn and Bacon Company. The use of the markings created the one-symbol-for-one-sound (phoneme-grapheme) relationship as in i.t.a.

An effort was made to have three new approaches in the three methods; i.t.a. and D.M.S. were new mediums and the basal readers were new to the third group. Methods were assigned to classrooms at random. The teachers volunteered in the spring to participate and were assigned the method by lot. Teachers took books home for study during the summer; a day of teacher training was held before school started in the fall. Visitors were discouraged, but spent equal time in each of the three types of rooms. Pretests showed no essential differences between the 21 classes.

Dr. Fry later found through measurement with the

Stanford Achievement Test that even within one method such as t.o. or i.t.a. the classroom means varied. This variance is shown in Table 8.

TABLE 8. MEAN RAW SCORE OF EACH CLASSROOM WHEN TESTED WITH STANFORD PARAGRAPH MEANING\*\*

Diacritical Marking System	Traditional Orthography	Initial Teaching Alphabet
11.7	23.5	15.6
16.9	22.9	15.4
22.1	21.2	17.1
20.7	17.1	20.0
15.5	17.3	21.7
19.6	19.4	22.3
<u>14.4</u>	<u>21.7</u>	<u>10.8</u>
Mean 17.27	20.44	17.55
Grade Score 1.7	1.8	1.7

\*\*Source of data: (13:611)

According to Table 8, Dr. Fry found more variance between the mean raw scores of each classroom, than between the means attained by use of the different methods, D.M.S., t.o. or i.t.a. Regarding this, he stated:

One interesting observation was that the variability between classroom means within one method was so much greater than the variability between method means that it is indeed difficult to see how anyone could ever place any credence in small method studies which compare Method X with Method Y using only one or two classrooms in each method. (14:361)

To gain credibility, he suggested that future research must use a larger number of classrooms.

The oral reading scores attained by the three groups are shown in Table 9.

TABLE 9. ORAL READING SCORES ON THE GILMORE ORAL READING TEST AT THE END OF GRADES 1, 2, AND 3\*\*

	D.M.S.	t.o.	i.t.a.
First Grade Subsample N = 111 students			
Accuracy (Grade Level) Rate (Words Per Minute)	2.5 45.9	3.1 58.4	2.7 44.6
Second Grade Subsample N = 127 students			
Accuracy Rate	4.3 84.0	4.5 85.8	4.5 79.2
Third Grade Subsample N = 101 students			
Accuracy Rate	5.6 101.8	5.9 99.4	6.5 90.0

\*\*Source of data: (14:359)

According to Table 9, Dr. Fry found no significant difference between the three populations tested. Dr. Fry suggested that the key to differences in beginning reading achievement was not class size or the method, but the teacher:

It must indeed be disconcerting for teachers to read that classes of varying sizes studied did not differ significantly in reading achievement. Teachers, however, can be encouraged by the finding that "good teachers" as determined by teacher-rating correlations do make a real difference in reading achievement. (14:362)

i.t.a. Research Conducted by The  
U. S. Office of Education

In the research project conducted by the United States Office of Education, Robert Chasnoss of Newark State College, New Jersey, set up the program. He organized an experimental and a control class in each of seven schools.

The children were matched according to sex, socio-economic status of the family and reading readiness opportunity at home. Also considered in the matching were kindergarten teachers' predictions of future reading success, placement in relation to other siblings in the family, teachers' advice, and data gained from drawings made by the pupil and analyzed by a psychologist.

One teacher taught reading to both the i.t.a. and the t.o. class in a school, another teacher taught the other subjects. An extra room was used only for i.t.a. As closely as possible the same procedures were used in each room, the same time schedules were followed and the same materials used whenever possible. Chasnoss gave the following purposes for the research:

1. To compare the results of a test presented in the i.t.a. to the experimental group and in the t.o. to the control group.

2. To find out whether there would be a significant difference between the mean scores of the experimental group and the mean scores of the control group when all subjects took the tests in the traditional alphabet.

3. To find out whether there would be a significant difference in mean scores that judges assigned to writing samples by the experimental group and the control group.

4. To interview and observe a selected sample of pupils in the experimental group and in the control group to determine whether there were differences in their behavior and in their comments about their reading experiences.

5. To test the selected sample of pupils and compare their scores in oral reading. (8:257-8)

No significant difference was found between the i.t.a. and t.o. populations when given the X and W forms of the California Reading Test, Lower Primary. It is noted that this test, given to the experimental and control children in a New Jersey area study, was given in t.o. to both groups. No difference was shown between 26 experimental pupils and 26 control pupils on the Gilmore Oral Reading Test. There had been no significant differences on the intelligence tests, kindergarten teachers' predictions

of first graders' success, or tests in arithmetic given before and during the i.t.a.-t.o. experiment. Only in the areas tested on a transliterated Stanford Achievement Test, Primary I Battery, Form W was a difference shown. The mean score of the experimental group was 22.20, of the control group - 19.39 (the difference is significant at the .01 level). On this same test, Word Reading and Word Study were higher at the .01 level.

Regarding further study, Mr. Chasnoss stated: "There is a need for follow-up studies in later grades to compare possible long-range effects of the use of two alphabets." (8:264)

#### Summary

I.t.a. was studied in the United States in several research projects. A variety of methods were used. This variety was in direct contrast to the one five-year study carried out in England.

The results in the United States were as variable as the methods used. Mazurkiewicz contended that i.t.a. was of merit while Fry, Chall, and Chasnoss felt that further research was imperative before a modified alphabet should be adopted to replace the traditional alphabet for teaching of beginning reading. Chall summed up her findings regarding the amount of research which has been

done by stating: "So far the experimental evidence is still too limited to allow definite conclusions about the long-term advantages (and disadvantages) of using a modified alphabet." (7:124)

These studies have been presented to give the reader background concerning i.t.a. Conclusions of the studies and recommendations concerning i.t.a.'s usefulness were presented in the next chapter.

CHAPTER V  
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The use of the Initial Teaching Alphabet in teaching beginning reading was investigated in this study. A review of published literature was made to determine what studies were done toward the simplifying and regularizing of the English language, what research had been conducted and what had been revealed on the usefulness of i.t.a. for the beginning reader.

In the review of literature it was found that many scholars have studied the phonetic irregularity of our English language. Several had invented writing systems which would simplify and regularize the English language. Contemporary i.t.a. was produced as a result of these studies, though i.t.a. was designed as an initial teaching alphabet to be used specifically for teaching children to read.

I.t.a. research began in England and spread to the United States. Major studies in the two countries were presented in Chapters III and IV, including the experiments in Oldham, England; Bethlehem, Pennsylvania; New Brunswick, New Jersey; and Newark, New Jersey.

### Conclusions

On the basis of the literature reviewed, the writer has concluded that i.t.a. was used in an attempt to solve problems encountered by the child beginning to read. The major problem children had in learning to read was that of the phonetic irregularity of many of the words in the English language. I.t.a. was created to correct this problem. Some research supported the assumption that when i.t.a. was used, children began reading more easily than did their t.o. classmates. It was reported in an article entitled, "thæ still wœnt tœd̩ the æ-bee-seez the modern wæ," concerning the Bethlehem children:

While Allentown's first-, second-, and third-graders are yawning through dull stories about Jimmy and Sue, (Bethlehem) children who use i.t.a. are reading about Flanagan and Finnegan, Christopher Robin, Mrs. Doodlepunk and the Five Chinese Brothers, Magellen and Vespucci, John Glenn and Dinosaur Ben, the Beatrix Potter books, Winnie-the-Pooh and When We were Very Young. While Allentown's children are copying, 'See the ball. The ball is red.," Bethlehem's first graders are writing book reports. (30:78)

The studies reported that the children started reading more quickly and with more interest in i.t.a. than in t.o. Not only did they read faster, but, as it was pointed out previously, with i.t.a. the claim was made that no child failed to learn to read, although normally 10-15% of the children in first grade usually turn out to be non-readers. All findings demonstrated the weakness of our English

language and the need for its reform. Inasmuch as spelling reform had been advocated and pursued by many scholars since 1500 with no success, as noted previously, it seemed likely that a reform would not be forthcoming.

Facing this reality, i.t.a. inherited a built-in problem, the problem of transition. Every child who learned to read in i.t.a. had to make the transition back to t.o. It was at this point that the effectiveness of i.t.a. was in the balance. Some felt that in spite of the transition period, i.t.a. was a more effective method of teaching beginning reading than t.o. Others were not as convinced. Some, in fact, wondered if the transition period was psychologically and/or socially detrimental to the child. A Johns Hopkins University professor, Dr. William B. Gillooly, expressed this concern when he said, "There has been no careful study of the possible emotional side-effects as children switch from i.t.a. to the traditional alphabet." (21:145)

On the other hand, it may have been that there were no such side effects. It may have been that there were values that weren't recognized. For example, the child's early success and heightened attitude toward himself because he became a fast and interested reader in the i.t.a. program, may have carried him through the transition period. Because there were no reported beginning reading failures in i.t.a., it may have been that every child became at least nominally

proficient at reading.

The point was -- it had not yet been discovered whether there were psychological side-effects in i.t.a. or whether it resulted in more positive values. Judging the child's progress solely on his ability to read faster than other children at any given testing time, as most i.t.a. studies did, may not have been a sufficient measure of i.t.a.'s usefulness or success.

#### Recommendations

In the studies that have been investigated, there was an apparent lack of adequate research. Although these studies offered the best data available, it was pointed out by a number of people that there was a basic weakness in each of them, namely, the sampling procedures. Concerning the research, Chasnoss stated:

Much of the research, however, is less rigorous than it might be. Many of the findings are based on incomplete samples, and sampling methods are not always defined. Findings of follow-up studies are sketchy. (8:257)

Specifically, as was pointed out before, sampling was not random in the studies in England because all the participants had volunteered. Therefore, the sample was not representative of the total school population.

Stewart admitted that the sample was not representative

of the school population in the Bethlehem, Pennsylvania, study. She explained, "The proportion of 270 children from upper and middle areas to 180 from the low socio-economic areas is not representative of the distribution of the total population of the school district. (28:660) Chall stated a similar conclusion regarding the Bethlehem sample: "Like Downing, Mazurkiewicz presents results for small samples of total experimental and control populations only and he gives no substantial evidence that the samples have comparable background characteristics." (7:123-4) In criticizing the Bethlehem study, J. William Asher commented, "Unfortunately a basic methodological error was made in the research design in one part of the study, and an error in one statistical test computation caused a misinterpretation of the data in one instance." (1:452) This error consisted of the fact that the i.t.a. and t.o. populations were significantly different. The research designer attempted to overcome this handicap by the use of matched pairs. Asher pointed out, however, that:

Matching of individual subjects from intact groups (and thus no possibility of random assignment of a matched individual to either an experimental or a control group) on the basis of variables with less than perfect reliability, is a basic methodological error. (1:452)

A further point in terms of research was that there needed to be more attempt to control the "Hawthorne effect,"

particularly in respect to the teachers' enthusiasm. Much of the success of the i.t.a. program in a particular classroom may have been attributed to the enthusiastic presentation by the teacher. Many of the statements made by teachers involved in the i.t.a. program clearly illustrated the accelerated enthusiasm of i.t.a. teachers. This factor alone could very well have accounted for much of the success of i.t.a. As Sceats indicated, "The enthusiasm of i.t.a. teachers... was frequently mentioned and this could conceivably be one of the consequences of its use." (26:129) Therefore, one of the major recommendations the writer would make is for further research studying the teacher enthusiasm factor.

Investigation should include research projects of a longer range, possibly following up on studies which have already been in progress. For example, the studies in Oldham, England and Bethlehem, Pennsylvania could well be continued through several further grades, perhaps as far as eighth grade. The studies should be carried on past the transition period to properly evaluate the effect of i.t.a. on the ongoing program of reading.

Further research should study the possible side-effects, caused by the use of the i.t.a. method, side-effects affecting the child's social and/or psychological development.

It was shown that i.t.a. did an effective job of

teaching beginning reading. With the built-in problem of transition, however, it had not, as yet, been proved to be a superior method. A substantial amount of research was conducted to determine its usefulness but the research was not yet adequate.

The writer observed that there was a noted decrease of articles concerning i.t.a. in the literature in the period of 1967-1969. This seemed to indicate that interest in i.t.a. was waning. Since the case for i.t.a. had not yet been proven either positively or negatively, it was the conclusion of the writer that it deserved continued research.

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