This pamphlet deals with the principle of systematizing traditional orthography (TO) to produce initial teaching media and the application of that principle in Initial Teaching Alphabet (i.t.a.). Part 1 discusses: three causes of failure in literacy, the need for systematizing TO for the better learning of literacy, TO research with infants, systematized media, systematized TO, learning at age 3, and integrated language learning. Part 2 discusses teacher responsibilities, TO and i.t.a. research comparisons, the examination of 25 reservations and doubts concerning i.t.a. and TO, and the effectiveness of i.t.a. A list of references is also included. (WR)
Evidence submitted to the Bullock Committee of Inquiry into Reading and the Use of English

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TABLE OF CONTENTS

PART I: THE VALUE OF INITIAL LEARNING MEDIA (I.L.M.s) IN PRINCIPLE

Paragraph 1. Introductory note.
   2. Three causes of failure in literacy.
   3. The need for systematizing traditional orthography (T.O.) for the better learning of literacy.
   4. Very many researches have shown the need to systematize T.O.
   5. Research finds T.O. a frustrating medium for infants.
   6. Classroom experience confirms the research findings.
   7. An authoritative interpretation of the research findings.
   8. T.O. particularly bad for older learners too.
   9. An I.L.M. obviously not the "old hat" over again.
  10. An absolution for past failures.
  11. Remediation is independent of the age or circumstances of the learner.
  12. An I.L.M. of benefit to all.
  13. Systematized media are preferable for many reasons.
  14. Systematized media reduce the burden of learning.
  17. A systematized T.O. fosters the teacher's skill and enthusiasm.
  19. Recognition of causes by a few not enough.
  20. Importance of correct nomenclature.
  21. Distinction between medium and method.
  22. Dis-satisfaction a pre-requisite to improvement.
  23. Why the self-satisfaction?
  24. I.L.M's need differ only insignificantly from T.O.
  25. Resistance to change.
  26. Why they ignore the evidence.
  27. The publication of the White Paper: "Education—a Framework for Expansion".
  28. Learning at age three.
  29. Russia's achievement of mass literacy a seven-year wonder.
  30. Integrated language learning.
  31. An urgent retrieval.
  33. We still have a lot to learn.
  34. Conclusion.
PART II: THE VALUE OF i.t.a. AS SUCH A SYSTEMATIZATION OF T.O.

Paragraph A. T.O. the arch-villain.
   .. B. No criticism of any of the other systematizations mentioned in Part I.
   .. C. Teachers are in duty bound to choose which they think the best.
   .. D. The fence-sitting of the Gallios no longer professionally creditable.
   .. E. T.O. unable to hold its own with i.t.a. in research comparisons.
   .. F. T.O. unable to hold its own with i.t.a. in classroom evaluation.
   .. G. These conclusions now established:—
      (i) as research evidence;
      (ii) as classroom experience.
   .. H. Doubts and reservations.
   .. J. "Views vary with proximity."
   .. K. "Some at least of the resistance to change lies in a rooted unwillingness to study the evidence."
   .. L. Twenty-five reservations and doubts examined:
      (a) The child:
         (i) That the new medium differs significantly from T.O.
         (ii) That the child has to unlearn what he has learned when he comes to the transitional stage, and that the transition presents difficulty.
         (iii) That the child has many more characters to learn.
         (iv) That the child is less able to read what T.O. he sees outside the classroom, and is confused by the—to him—different medium.
         (v) That the child is confused when his parents move home and he moves to a school which does not use the new learning medium.
         (vi) That the child has difficulty in forming the new characters.
         (vii) That the child's spelling is made even worse.
         (viii) That the T.O. child catches up.
Twenty-five reservations and doubts: (continued)

(i) That it helps the quick learner, but not the slow.
(ii) That it helps the slow learner, but not the quick.

(b) The teacher:
(i) That schools soon revert to T.O. and do not stay with i.t.a.
(ii) That the teacher has to unlearn how to teach, and to learn afresh.
(iii) That good teachers don’t need i.t.a.
(iv) That it has been the enthusiasm of the teachers—not the merit of the new medium—which has obtained the otherwise inexplicable better teaching results.
(v) That teachers are induced to neglect eclectic methodology because the approach is exclusively phonic.
(vi) That the teacher is embarrassed when children are “transitioning” at intervals, while there are children needing both media.
(vii) That the child—particularly the slow-learning child in the “top infants”—may be unduly hastened by the teacher to make the transition in reading.

(c) The parent:
(i) That the parent is unable to help.
(ii) That my child ought not to be used as a “guinea-pig”.

(d) General:
(i) That i.t.a. is not a panacea.
(ii) That the new media are only “gimmicks”. There are all our well-tried methods which, if properly applied to T.O., will get as good results, if not better.
(iii) That the variety of books is insufficient.
(iv) That the quality of the books in T.O. as well as in i.t.a. is not high enough, nor the supply adequate for expanding reading ability.
(v) That the move to a new medium away from the old has been based not on genuine educational research and classroom experience, but on the “big drum” of public relations and a desire to climb on a popular band-wagon.
Paragraph L. Twenty-five reservations and doubts: (continued)
(d) (vi) The "commercial smear"—that there is a lot of money to be made out of the sale of books written and published for the teaching of reading.

M. Summing-up.
N. Conclusion.

(There is a list of references at the end of this paper.)

PART I

The value of initial learning media (I.L.Ms.) in principle

1. Introductory Note: I have read Dr. Pidgeon's evidence to your Committee and assume that you would wish me to complement his evidence, and in so doing, to cover new ground. If so, there are two main sections to which such evidence should be confined. The first is the principle of a new initial learning medium (I.L.M.), in order to systematize traditional orthography (T.O.) while nevertheless conserving a high degree of similarity; the second is concerned specifically with i.t.a. as one such medium. In Part I, I will deal only with the principle of systematizations of T.O. as I.L.M's. I sum up in a Conclusion for Part I, and proceed to Part II thereafter.

2. Three causes of failure in literacy: Dr. Pidgeon's thesis cited three general factors in early failure to read and write, namely:—
   (i) Language competence;
   (ii) The teacher's skills and enthusiasm;
   (iii) The medium through which reading is learned.

   In Part I, I deal with the principle of the third of these—the principle of systematizing T.O. to produce Initial Teaching Media—and in Part II, with the application of that principle in i.t.a.

1 At the present time there are a number of I.L.M's deserving consideration. There are three colour media, one diacritically-marked medium, two augmented media, and one digraphic medium—World English Spelling (W.E.S.). All these deserve consideration because they provide learning materials specifically designed for the initial and remedial teaching of reading and writing. (See p. 19 of Dr. Pidgeon's evidence; pp. 80-105 of "i.t.a.: An Independent Evaluation" by Warburton and Southgate; and Chapter 6 in "Alphabets and Reading" by Pitman and St. John.)

4
3. The need for systematizing traditional orthography (T.O.) for the better learning of literacy: (in initial as against remedial learning)

T.O. is in itself a cause of:

(i) failure for a substantial proportion of those who leave the infant school;

(ii) frustration for another substantial portion; and—

(iii) unnecessary difficulty for the rest who succeed—but only more slowly, and with little early success—in writing.

4. Very many researches have shown the need to systematize T.O.:

Many researches (see footnote 4) into the use of I.L.M.'s have shown that T.O. is a major cause of failure to read. Since prevention is better than cure, it follows that children should be protected—in their first years in the infant school—from the frustrations and failures arising from T.O.

5. Research finds T.O. a frustrating medium for infants: In every research which has compared T.O. with a systematized orthography for initial learning, T.O. has been shown to be no better, and—in the majority of researches—worse. These findings, in respect of 17 of these many researches, were most carefully evaluated by the late Professor Warburton, who concluded that T.O. is not the best way to learn—the load of learning is unnecessarily great for all, and intolerable for the minority. What was determined 600 years ago has proved to have fallen far short of the ideal for ease in learning.

6. Classroom experience confirms the research findings: Vera Southgate (pp. 152-153) sets out the thirteen “main advantages” of an I.L.M. which she collected as “the views of knowledgeable or interested people to represent a swathe cut right through experience and informed opinion” (p. 16). (The list is reproduced at Para. G in Part II, pp. 17 and

2 The figures from the researches of Dr. Joyce Morris in Kent (“Reading in the Primary School”, NFER 1959) and of Professor John Downing sporadically over England (“The i.t.a. Symposium”, NFER 1967—see Attachment A) agree together that after two-and-a-third years in school, 45% of the children have not succeeded in being able to read sufficiently well—even in Book III of “Janet and John”, etc.—to be ready to tackle Book IV. This proportion of failure persists throughout later years in the junior school. (“Standards and Progress in Reading” by Dr. Joyce M. Morris, NFER 1966.)

3 The figures from Professor Downing's Research show that only 3.1% had passed into and beyond Book IV even after a year at school. (“The i.t.a. Symposium” by John Downing: Table E.1—see p. 35 Attachment A.)

4 Most of these comparisons have used i.t.a. (over 80) as the alternative to T.O., but—though less extensive—there have been researches using "Words in Colour", "Colour Story Reading", Unifem, and the American Dr. Edward Fry's Diacritical Marking System (D.M.S.). The findings were always the same: never a comparison showing T.O. significantly better than any of the new media; the great majority showing T.O. significantly worse than the new media.

5 (Page 234/5.) See Part II, Para. G (i) on p. 17 hereof.
18.) These advantages were collected in respect of it.a. only, but I concede that they apply also—at any rate in part—to the other I.L.M.'s. Vera Southgate also listed seven views which are described as "main disadvantages". These are also set out in Part II, Para. G, p. 19, though they are more misgivings even than reservations to advantages and not actual disadvantages: all are examined in that section of Part II, Para. L. pp. 21-33 under the title "Reservations and Doubts".

Meanwhile it should be emphasized that all thirteen advantages reported support strongly Professor Warburton's second conclusion from the seventeen researches—that "the best way to learn to read in T.O. appears to be to learn to read in" a medium other than T.O. (p. 235).

7. An authoritative interpretation of the research findings. The Dean and the Director respectively of the University of London Institute of Education and the National Foundation for Educational Research agreed that the research findings showed that as an I.L.M. "the medium has substantial advantages over T.O. in the early stages of teaching children to read". This conclusion was issued in a Joint Press Statement, following the publication of the Schools Council Report. It is weighty support for the view that T.O. is a frustrating medium for infants which should be discontinued as the I.L.M. They also were concerned that children should be protected from difficulty in their early attempts at learning, urging teachers "to recognize that on what they decide depends the welfare of countless children—especially those who now have difficulties"—deploiring the resistance to change. (See Attachment B p. 36.)

8. T.O. particularly bad for older learners too. Though there have been no full-scale comparable well-designed researches giving reliable findings on the use of a systematized orthography in remedial classes, there is sufficient evidence from classroom experience to show that T.O. imposes a psychological burden—in addition to the educational one—even greater upon a failed beginner than upon one who is just starting to read. Those who have failed consistently in learning with T.O. come to reject

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6 See p. 36 Attachment B. The Dean and Director of the London University Institute of Education and of the NFER-statement.
7 But not, of course, as the reading medium after initial learning.
8 The figures are very great, even in Britain: 800,000 here, and 6,000,000 every year in the English-speaking world. The London University and NFER research showed that 30% can be rescued from failure before entering the junior stage. (See p. 35 Attachment A.)
9 The written evidence to the Sir Lionel Russell Committee on Adult Education given on 22nd February 1971 by Mr. Cliff Edwards, Dr. John Gardner and myself is relevant. (See p. 36 Attachment C.) Attachment E pp. 46-49, from the Home Office, and the evidence to that Committee of Major-General Henry Evans, Director of the Royal Army Education Corps, are also relevant. (See also pp. 37-46 Attachment D: "i.t.a. with Adult Backward Readers: A survey of a five-year experiment in the British Army," by Major Colin Stevenson of the Army School of Preliminary Education.)
it—and all it represents in frustration and humiliation. Hence a new medium offers a “new deal” and promises by its freshness and consistency a foretaste of success which is soon experienced by a large number of those using it.

9. An I.L.M. obviously not the “old hat” over again. The novelty of a different medium brings a welcome change in the remedial reader’s attitude, and the reassuring discovery that (as in many of the new media—Unifon is the exception) 40% of the most frequently recurring structural words (e.g. at, did, and, but, got) recur consistently in the same shape as in the old; another 40% in an only slightly altered form. Thus 80% of words met in context are easily related to the old shapes. This gives the remedial learner confidence in tackling the interspersed words which he could not manage in T.O., but now finds easy when systematically spelled—and, furthermore—easily decipherable thanks to context, because so many of the words on either side now present no difficulty. Thus not only is \textit{wuns} read more easily than \textit{once (onky)}, but it is so often also clearly inferable from context when the words on either side are easily read.

10. An absolution for past failures. In this way the failed reader of any age who later learns to read is able to blame T.O. for his past failure. “If only they had given me this simple medium when I first started school, I would have succeeded. It wasn’t my fault, but the fault of the alphabet. Now I can read; I am not a failure. I’m now like all the others.” In this new-found belonging to society, his antagonism to society is reduced; both the Home Office and the Ministry of Defence notice numerous examples of such improvement in personality by redeemed illiterates.

11. Remediation is independent of the age or circumstances of the learner. Even as a systematized orthography can be a boon in any field of remedial work, so the persistence with T.O. on which the reader has already failed can be a continuing hindrance, especially for the older and handicapped learner—a wailing wall of despair against which he bangs his head. Why unnecessarily burden him with the greater load inherent in T.O.?\footnote{In the colour systems the shapes of 100% of the words are unaltered.}

\footnote{See letter from the Home Office dated 29th December 1971 (Attachment E pp. 46-49) and the paper by Major Colin Stevenson (Attachment D pp. 37-46).}

\footnote{It is a mistake to regard an I.L.M as a significant departure from T.O. (See Part II, Para. L (a) (i), p. 21.) The sophisticated attitude is to apply the following test: Can I read this I.L.M. with certainty? If so, it must be so alike to T.O. that it can replace T.O., certainly as the initial or remedial learning medium. The specimen at Para. 24 p. 11 also applies.}
12. An I.L.M. of benefit to all. The principle of systematizing T.O. improves the efficiency of all "methods", and is applicable to all ages and all kinds of learners. T.O. is identified, through those findings in relation to all I.L.M's, as a dispensable handicap.

13. Systematized media are preferable for many reasons. They are consistent for both look-and-say and phonic methods; they allow the author, publisher and teacher the maximum freedom in the content, language and vocabulary of their material—a liberating factor in the literary quality of the child's reading matter which is of paramount importance. Moreover their very consistency encourages the child to richer expression in his writing, which better develops and reflects his language competence than does even his reading.

14. Systematized media reduce the burden of learning. There are very many fewer characters to learn for reading (see Part II, Para. L (a) (iii), p. 22) and in all but the colour systems and D.M.S., no orthographic spellings need to be learned for writing.

15. Systematized T.O. fosters early writing. Vera Southgate showed that a systematized T.O. (i.t.a.) makes for early writing as well as early reading, and promotes inter-action between all branches of language. Thus the activities of listening, speaking, reading and writing all support each other. Through a consistent alphabet, a child early learns to talk on paper with his pencil, as a counterpart to talking with his tongue—the very essence of self-expression and communication.

16. A systematized T.O. fosters language competence. The need for diagnosis of language inadequacy is urgent at all stages of education, from pre-school onwards. (Para. 21 of the recent White Paper, "Education: a Framework for Expansion", indicates the desirability of such diagnosis.) Diagnostic tests are easier to design and administer for those who have begun to learn literacy, than for those who have not yet begun. It is very welcome news for the first that the NFER should have produced diagnostic tests in language competence for immigrant children, and that they expect them to be also suitable for those who should be, but are not, English-speaking. It is to be hoped that the NFER will produce tests also for pre-school children, and provide what the White Paper suggests for the as yet illiterate pre-school and infant school child.

At all ages an I.L.M. (in enabling language to be learned while engag-

13 See Paras. 6, 7 and 8, p. 153, for the relevant extract from her list of "The Main Advantages of i.t.a." (pp. 152-3) reprinted on p. 17 hereof.

14 In the I.L.M's which use colour, pointing with a cane by the child to words on the classroom wall forms an initial substitute for writing.
ing the sense of sight and the skill of writing as well as the sense of hearing and the skill of speaking) is more helpful than is T.O., in which this harmony of four language activities is impossible.

17. A systematized T.O. fosters the teacher’s skill and enthusiasm. The teacher’s role is most important, particularly in teaching reading. It was the second general factor in Dr. Pidgeon’s thesis for improved results in literacy.

Vera Southgate (p. 153) reported a view “supported by head teachers, local advisers and other visitors to schools”, that “the introduction of (an I.L.M.) has . . . contributed to an increase in the teacher’s own understanding of children’s learning, with a consequent increase in their teaching proficiency . . . particularly an improvement in the proficiency of less able and less experienced teachers”. (See Vera Southgate’s “The Main Advantages of i.t.a.”, Part II, Para. G (ii), No. 12, p. 18.)

18. Causes of failure rarely recognized. Of the three factors named above as causes of failure in literacy, language competence is increasingly, though tardily, recognized as crucial. Even more tardily recognized has been the relevance of medium, and the inefficiency of the traditional medium. Now, after thorough research, T.O. has been found grossly wanting—to the surprise of the traditionalists who were reared on it! After six centuries T.O. has been found to be a major obstacle on the road of learning.

19. Recognition of causes by a few not enough. It took the medical profession as a whole fifty years to accept the surprising findings and implications of Lister’s aseptic practice in surgery. Let us hope that the teaching profession is less rejective.

20. Importance of correct nomenclature. When the “dry colic” was identified and re-named as “appendicitis”, and gangrene as “sepsicaemia”, the way was opened to remedy. When reading disability comes to be named in relation to language deficiency as one cause of failure (and no longer by such labels as “dyslexia”, which relate only to observed but unexplained facts) the need for teaching language competence will be accepted as pressing, and the remedy applied. Meanwhile the use of the words “language competence” has begun to catch on, and has done so more quickly than the word “medium”, both in usage and understanding.

21. Distinction between medium and method. Even textbooks on reading tend to confuse these two words, and ignorantly speak of new media as new methods. The medium used has a general effect in any teaching situation, independently of method. Method, by contrast, has its effect in an individual—not a general—application.
22. Dissatisfaction a pre-requisite to improvement. The Commissioner of Education for one of the States of America (where the reading problem and the importance of a change of medium in the first learning of literacy is just as much an urgent concern as it is here) began a recent address with the words:—

"The first condition of progress is a lively and peremptory dissatisfaction."

Again, D. H. Lawrence writes, in "Women in Love"16:—

"You have got very badly to want to get rid of the old before anything new will appear."

It is odd, then, that when it might be supposed that there is now—among many at any rate—"a lively and peremptory dissatisfaction" with present failures in the teaching of literacy, there are nevertheless among head teachers and class teachers (who are those who alone matter) too few who "want to get rid of the old". Instead we find complacency too prevalent, and very little "lively and peremptory dissatisfaction" with T.O. as the offending cause. This is greatly to be deplored, because it might be hoped that those teachers and others responsible who are faced with the failures of T.O., would be anxious to examine the facts, and, in their light, be ready to admit that the continuance of T.G. as the medium for instruction in literacy is indefensible. The figure in 1961 of 17% of the 15-year-olds of England and Wales who, notwithstanding their chronological age of 15, had a reading age of only 11-plus or worse16 was by 1971 even worse.17 The latest figures from the Secretary of State show 19% found to be "backward readers" or worse.17

23. Why the self-satisfaction! It seems that the support for T.O. among Heads and practising teachers—notwithstanding its obvious unsuitability as a learning medium—is based upon the rejection of the facts about the high degree of failure when T.O. is used as the learning medium, and upon hostility to any change. This rejection is in turn based on the supposition (not supported by any facts) that the new media need to differ—and do in fact differ—significantly from T.O.18

17 Hansard, 18th February, 1972. (p. 50 Attachment F.)
15 In the case of Words in Colour and of Colour Story Reading, there is no difference at all, the system being applied by consistent changes in colour and the shape of the background, and not by consistent shapes. Examples of both of these, and of D.M.S. and of i.t.a., are given on (pp. 294-297).
24. I.L.Ms need differ only insignificantly from T.O. The intention to systematize T.O. to function as its own I.L.M. does not involve a significant departure from T.O. Indeed, it is clear, as will be seen below, that there are far greater departures within T.O. than there are between the characters and forms in the I.L.Ms and those in lower-case T.O.¹⁹

T.O.1. THAT THERE ARE FAR GREATER DEPARTURES WITHIN T.O. THAN
T.O.2. that there are far greater departures within T.O. than
T.O.3. that there are far greater departures with in T.O. than
D.M.S. that there are far greater departures within T.O. than
W.E.S. that there are far greater departures within T.O. than
i.t.a. that there are far greater departures within T.O. than

It will be seen that in that random selection all the equivalent characters in the variant T.O. alphabets differ, and to a major degree (excepting only of c and o), whereas the differences from lower-case T.O. are minimal in all three I.L.Ms. The latter all closely resemble lower-case T.O.

25. Resistance to change. By reason of this hostility to any change, the false supposition holds the field that all is well with the teaching of literacy ("at any rate in my class and over my many years of teaching!"). There exists too obviously and too widely that very "resistance to change . . . rooted in an unwillingness to consider the evidence" referred to in Para. 7, p. 6 (See Att. B, page 36.) This notwithstanding the wide publicity that has been given to the plea addressed to teachers by the two leading authorities in Britain "to examine the evidence and to recognize that on what they decide depends the welfare of countless children—especially those who now have difficulty." (Attachment B.)

University Departments of Education, Colleges of Education, Teachers' Centres, H.M. Inspectors, and the Advisers and Organizers employed by Local Authorities should all play their part in urging their students and teachers to study the evidence, and to accept that T.O. is so inimical to the welfare of the learning and remedial child that a change to some better medium is compulsively desirable, and that it is up to head teachers and their staffs to choose which of the several initial learning

¹⁹ The words in italics have been reproduced as Fig. 1 above in six different alphabets in such a way that the characters in each word appear vertically in relation to each other.
media they ought to use instead. The Primary Education Committee of the N.U.T. is now active in fostering more successful reading. Their help could be of great value to your Committee should you wish to enlist it. The fears and prejudices of the rank and file head teacher and teacher are more likely to be resolved by initiative from that quarter than from any other.

26. Why they ignore the evidence. A cause underlying this wide refusal to study the evidence and to make trial is undoubtedly the principle that “dog does not eat dog”, and that, in the words of Professor Stanislav Andreski20,

“teachers ostracize those who criticize their colleagues and undermine their standing in the eyes of the pupils.”

Inevitably (but wrongly) any criticism of T.O. as an I.L.M. harmful to the learner, and any suggestion of a change to a better medium, come to be regarded by many teachers as criticism of them and their colleagues, and of their professional skill. This tendency is aggravated among those in the reading establishment for whom any disturbance of the status quo is distressing, and to whom public awareness of the high incidence of reading failure is a blot on their escutcheon.

Antipathy to i.t.a. and to those who teach it is too widely reported by those who have been ready to study the evidence and to put it to trial, for this cause to be glossed over.

27. The publication of the White Paper, “Education: A Framework for Expansion”. This recent development, with its proposals for a considerable expansion of pre-school education, raises still higher the importance of your Committee’s deliberations, and adds topicality to the lead which you will have the opportunity to give at the very right moment in three most important directions—the teaching of language, the improvement of the teacher, and the use of an I.L.M. for the teaching of language: and for the teaching of literacy as the visual counterpart of oracy, and for the in-service training and “work-shopping” of teachers to enable them to undertake both of these teaching innovations to the greatest possible effect.

28. Learning at age three. It is now known, through the reports of Professor Moore at Yale and Professor J. A. Downing then at London University Institute of Education21 that pre-school children aged 2-4


21 First International Reading Symposium” (U.K.R.A., Oxford University, England, 1964) and “Proceedings of the Second Annual International Conference on the Initial Teaching Alphabet” (Lehigh University, U.S.A., 1965). “Reading Readiness Re-examined”; “Materials and Instructions for Beginning Reading with i.t.a.”
are not, by reason of age, unable to learn literacy as an extension of their oracy—but only provided that the medium employed relates what is seen, and needs to be reproduced in speech, to that which the child hears and will habitually speak. It was found in the London University Institute of Education and the NFER research which started in 1961, that the four-year-old children of Oldham learned to read more quickly in i.t.a. than did the five-year-olds also in i.t.a.—but not significantly. (In T.O., incidentally, the control group of four-year-old children did significantly worse than the five-year-olds.)

29. Russia's achievement of mass literacy a seven-year wonder. Notwithstanding that there is not one but several different languages spoken in the homes, reading and writing in the main Russian language has come to be so successfully learned that educators elsewhere are envious and incredulous. They need not be surprised, because in Russian, the medium for learning is as apt for Russian as i.t.a. is for English. The upper- and lower-case alphabets are virtually identical, and the spellings closely relate that which is seen on the page to that which is heard. Thus Russian T.O. is an ideal I.L.M.

30. Integrated language learning. It is now known that the four aspects of language—listening, speaking, reading and writing—are inter-linked, each nourishing the other. Progress in one brings progress in the others because the stimuli to any one nerve to the language centre of the brain stimulate also all other nerves which feed that centre. Hence a new word used in any of the four language manifestations is at once absorbed into the others. To the extent that a young child or other illiterate is operating in only two manifestations (listening and speaking) the opportunities are reduced. Fortunately, the occasions of practice are greater, so that there is plenty of nurturing of the one by the other.

31. An urgent retrieval. If children have missed this opportunity up to the age of three (while they are specially apt for language learning) the need becomes particularly urgent for every opportunity to be taken thereafter to teach not oracy alone, but literacy and oracy pari passu, and to relate the literate visual and tactile activities for the word (reading and writing) to its corresponding oral auditory and tactile equivalent (listening and speaking), and to concentrate on those words, concepts and structures which are not known to the child. If any concept, together with its relevant word, is taught in the one form, it is better and more easily learned when presented and practised not only in that form but

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22 Professor Ritchie Russell, Professor of Chemical Neurology, Oxford University.
23 The use of an i.t.a. electric typewriter has been found to be well within the capacity of the three-year-old child. Pointing to characters on a wall chart is also a means for him to "write" at a very early age.
also in the three other forms, so that the three senses of hearing, seeing, and touching may be supportively involved. Even more when teaching the active, and more exacting, form of communicating by language, a "word" is better and more easily learned if both forms—the spoken and the written—are practised supportively. Thus the sense of touch is also involved—and doubly involved with the senses of hearing and seeing, in those two kinaesthetic expressions of speaking and writing.

32. The White Paper: a golden opportunity. Now is the time for all educationists to ensure the appropriate in-service training for all those nursery school teachers who will receive into their classes the new large intake of non-linguistic pre-school and infant children.

These teachers must be equipped to tackle this new task of teaching language to children who do not know their mother tongue and will be helpless at guessing what is the meaning of the words which the teacher utters, but which the child hears only as noises. Equally, if the suggestion is right that learning literacy pari passu with oracy is advantageous, they will need to understand the principle of an I.L.M., and to become able to teach effectively with it.

The need is urgent, seeing that the White Paper (at its Para. 21) envisages that every such child should be diagnosed "for the earlier identification of children with special difficulties which, if neglected, may inhibit their educational progress". The need is important, seeing that—as the late Dr. Stephen Wiseman pointed out—the training of nursery and infant teachers has been hitherto directed to develop "a middle-class child from a tidy suburb, providing him with the activities and opportunities denied him at home", and not for "the foot-loose and fancy-free youngsters from the slums with little or no parental supervision".

There is ahead a major task of in-service training if the needs of the non-linguistic child are not to be neglected and the good intentions of the White Paper not frustrated.

33. We still have a lot to learn. It may appear offensive, particularly to sophisticated man in the 20th century, to remind him that not in all fields has *homo sapiens* burst the shackles of the past which have constricted his freedom to think straight. We, who look back in shame at the attitudes of the great (but not great enough) astronomers who rejected not only the conclusions but even the evidence of Galileo’s major breakthrough, and we who can look similarly with shame at even later leaders of academic thinking who refused to study the evidence about, and evaluate, Mme. Curie’s conclusions on the new atoms Polonium and Radium (which disobeyed all the supposedly well-established behaviour of any new atom) are obliged to recognize that such

revolutionary changes, which overthrow the axioms of the past, are not easy to achieve. May it be hoped that a Committee appointed with the terms of reference which are yours, will induce the reading Establishment, head teachers and parents, boldly to face the issue which has for so long been evaded—since the days of Sir Thomas Smith in 1568, Benjamin Franklin in 1768, and my grandfather and that young Eton and King’s College, Cambridge, Scholar A. J. Ellis in the first half of last century.

34. Conclusion. The conclusion is clear. Only by combining all forms of language will children learn to read and write easily and happily, first in the initial learning medium, later in T.O., and thereafter develop the mastery of the mother tongue in all its forms. Only if the medium is as compatible as possible with T.O. will the transition to reading and spelling in T.O. be as effortless as, in all the I.L.Ms, it has proved to be25.

PART II

The value of i.t.a. as such a systematization of T.O.

A. T.O. the arch-villain. I hope the Committee will accept that my position is one against the continued use, as our initial teaching medium, of our at present unsystematized medium, and not for any particular of the present systematizations—even i.t.a.

So strong is the case that T.O. harms the learner in his earliest stages that I rejoice whenever I learn that a head teacher has discontinued T.O. as the initial learning medium and has adopted, and is thus employing instead, any of the several media mentioned in Part I.

The important point is to give to all beginners, with the minimum of delay, the great benefits which come from a systematization of T.O., and to protect them from the confusion of that which is unsystematic. The question which one of several systematizations to prefer is therefore a clearly secondary point, seeing how deficient T.O. has been shown to be for initial learning.

B. No criticism of any of the other systematizations mentioned in Part I. The fact that this Part II, in dealing with i.t.a., virtually ignores

25 Welsh literacy is almost as apt an I.L.M. as Russian. Where the Welsh language is in the home and in the school and the Welsh-speaking children have become fluent readers in Welsh, the learning of literacy also in English is automatic, if the children are bilingual. The dominance of meaning in context is so strong: thus an I.L.M. for English is not needed for such children. Having surmounted a low first hurdle in any language, even a much higher second hurdle presents no difficulty.
the other systematizations mentioned in Part I, implies no more than that the structure of my evidence has been planned to deal in Part I with the principle of systematization, and in Part II with i.t.a. as such a systematization.

**C. Teachers are in duty bound to choose which they think the best.** Once the crucial decision that T.O. should be discontinued has become generally accepted, it will be up to the pundits and the teachers to act on their judgments and preferences to select which of the alternatives to favour. I am sufficiently dispassionate not to care—other than that T.O. must be discontinued as the learning medium—and too old to wish to start a secondary struggle as to which one or other of the new media should be favoured by any particular head teacher who effectively seeks to serve the interests of his children. Change—and change at the earliest—is all that I seek, and is what the child most greatly needs.

**D. The fence-sitting of the Gallios no longer professionally creditable.** On the first issue—that T.O. should be now discontinued—there is no longer an option for a teacher or anyone to "sit on the fence". The research and the classroom evidence that T.O. is a harmful learning medium and must be discontinued as soon as possible is now so incontrovertible that the fence is seen to be a spiked railing on which sitting comfortably is not any longer a possibility.

**E. T.O. unable to hold its own with i.t.a. in research comparisons.** There have been, in i.t.a. alone—as Dr. Pidgeon has pointed out (his evidence: Note I, p. 17)—

"over 80 studies using control groups which have compared i.t.a.- and T.O.-taught children. . . . Over two-thirds have demonstrated the superiority of i.t.a. on a variety of measures. None has produced consistent results in favour of T.O."

**F. T.O. unable to hold its own with i.t.a. in classroom evaluation.** There has been one major evaluation¹ which comprehended not only seventeen of those over 80 researches, but also wide classroom experiences—

"The collection and evaluation (by Vera Southgate) of the views of knowledgeable people who had been closely connected with the use of i.t.a., in such a way that this verbal evidence would represent a swathe cut right through every stratum of people involved in any way with i.t.a." (p. 2).

As will be seen in Para. G (ii) below, classroom experience with now more than two million children has confirmed the findings of research.

G. These conclusions are now established:—

(i) As research evidence: Professor Warburton has categorically stated that:

"There is no evidence whatsoever for the belief that the best way to learn to read in T.O. is to learn to read in T.O. It would appear rather that the best way to learn to read in T.O. is to learn to read in the initial teaching alphabet" (pp. 234/5).

(ii) As classroom experience: Vera Southgate, in her evaluation of "the views of knowledgeable people . . . closely connected with i.t.a." (pp. 152/4) reported as follows:

"A. THE MAIN ADVANTAGES OF i.t.a.

1. The use of i.t.a. has made the early stages of learning to read easier and more enjoyable for children. As a consequence they learn to read earlier and in a shorter space of time.

2. This early reading is not merely sounding words but is usually reading with understanding.

3. Children soon find they can make successful attempts to read unknown words themselves, without help from teachers. As a result, young children choose to read individually more often than when T.O. was used, read for longer periods of time and read many more books.

4. The materials read by infants soon extended beyond those of a basic reading scheme into a wide variety of story books, information books and reference books, as well as comics, newspapers, magazines, pamphlets and so on.

5. i.t.a. has brought about a reduction in the number of non-readers and struggling readers in infant classes and has consequently reduced the frustration and lack of confidence formerly experienced by children who found difficulty in reading with T.O.

6. The beneficial effect of the introduction of i.t.a. on children's free writing was listed as one of its main advantages quite as frequently as its effect on reading.

7. The comparative regularity of the sound-symbol relationship has resulted in children's early discovery that they can make good attempts at spelling any word for them-

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Some who have studied these two findings suppose that two qualifications, which immediately follow, are reservations to those two most favourable conclusions. Part II, Para. L (a) (viii), p. 24, clears up both.
selves. The result has been a marked increase in the quantity and quality of children’s free written work.

8. Children who have learned to read and write easily and happily with i.t.a. tend to develop confidence and independence and to show initiative and responsibility in other aspects of school life at a quite early age.

9. The early mastery of the skills of reading and writing, together with the independent and confident attitudes developed by children, has led naturally to an increase in individual study and exploration which is in line with current heuristic methods of learning.

10. The use of i.t.a. has benefited work other than reading and writing in infant classes in two different ways. Firstly, children’s earlier skill in reading and writing has been instrumental in extending their understanding of other subjects, for example mathematics and science. Secondly, the fact that children master the basic skills of reading and writing with greater ease and speed has enabled the teacher to devote more time to the needs of individual children and to aspects of the curriculum other than the language arts.

11. Teachers themselves obtain greater pleasure and satisfaction in children’s progress in reading and writing. They spoke with feeling of the end of the ‘long uphill grind’ of children learning to read with T.O., and the abolition of long queues of children waiting to ask for help in spelling words.

12. Teachers also rated it as an advantage that the introduction of i.t.a. has stirred up a great interest in reading among themselves; attendances at lectures and conferences, as well as staffroom discussions have contributed to an increase in teachers’ own understanding of children’s learning, with a consequent increase in their teaching proficiency. This view was supported by head-teachers, local advisers and other visitors to schools, who also noted particularly an improvement in the proficiency of less able and less experienced teachers when they use i.t.a. rather than T.O.

13. Teachers and others counted it an advantage of i.t.a. that its introduction has resulted in an increasing interest by parents in their children’s reading, often exemplified by closer co-operation between parents and teachers.”

This was immediately followed (p. 154) by the following seven “Main Disadvantages”:
"B. THE MAIN DISADVANTAGES OF i.t.a.

1. Certain people, including teachers, parents, local inspectors and educationists, who were not only familiar with i.t.a. being used with infants but also favourably disposed towards it, continued to have misgivings about the effect on the children of using i.t.a. in the classroom while encountering T.O. in every other situation in their total environment. (Paras. L (a) (i) and (iv) pp. 21 and 22 refer.)

2. There were instances of parents reporting the frustrations experienced by children, who were not yet ready to transfer from i.t.a. to T.O., when they attempt to read T.O. print at home in books, comics, newspapers and other printed materials. (The same paras. and L (a) (ii) p. 21, L (b) (vii) p. 29 refer.)

3. Certain parents find it a disadvantage to be unable to give the help requested by their children who are reading or writing in i.t.a. at home. (Para. L (c) (i) p. 29 refers.)

4. Many parents, teachers and other educators are very conscious of the problem which arises when a family moves and a child who is not a fluent reader in i.t.a. has to attend a school using only T.O. (Para. L (2) (v) and (i) and (ii) pp. 23 and 21 refer.)

5. Local inspectors, as well as teachers themselves, are aware of the danger of infant teachers endeavouring to hasten children’s transition in reading from i.t.a. to T.O. This problem is most likely to arise when slower infants are about to be promoted to those junior schools known, or thought, to be not very favourably disposed towards i.t.a. (The same paras. refer.)

6. Owing to publishers’ doubts regarding the possible extension of the use of i.t.a. the number and variety of books and other reading materials available in i.t.a. for beginning readers is still small compared with early reading materials printed in T.O. Furthermore, experience with i.t.a. has not yet been sufficiently extensive as to result in the most appropriate reading materials for the early stages being devised. (Para. L (d) (iii) p. 31 refers.)

7. Once children have mastered the initial stages of reading, H.M. Inspectors, local advisers, teachers and others do not consider that the quantity and quality of books available for infants cater adequately for their expanding reading ability. This lack is felt not only in i.t.a. books but also in suitable T.O. books for young readers who have made the transition from i.t.a.” (Paras. L (d) (iii) and (iv) pp. 31 32 refer.)
H. Doubts and reservations. There are also four "remaining disadvantages" reported by Vera Southgate (pp. 157/160), and there are other "views" not reported by her but often held. All these deserve consideration. The question needing to be answered is whether any or all of these should be disregarded as the reservations of those who have studied i.t.a. not sufficiently long or fully (or of those who have too strong an atavistic preference for T.O. and reluctance to consider that i.t.a. could possibly have sufficient advantages to justify the replacement of T.O.) or whether they should be conceded as disadvantages of i.t.a. which are justifiably alleged. All of these 25 (7 plus 4 plus 14) "doubts and reservations" have been assembled and will be discussed in Para. L below (pp. 21 to 33). They have been assembled for greater convenience, under the four headings: (a) the child, (b) the teacher, (c) the parent, (d) general.

Any serious study of i.t.a. and, indeed, of the principle of systematizing T.O.—ought to include an examination of every one of these "doubts and reservations" which have hitherto greatly delayed the general acceptance of the principle and the adoption of i.t.a. in particular.

J. "Views vary with proximity." Before, however, considering these 25 points, a further conclusion of Vera Southgate’s (from her swathe cut through experience and informed opinion) is worth noting (p. 161):—

"Views vary with proximity".

"The writer was struck forcibly by the fact that the closer the experience of a person to the task of actually helping young children to master the beginnings of reading and writing in i.t.a., the greater his or her approval of i.t.a. tended to be. Teachers of reception classes and younger infants were usually more enthusiastic than teachers of older infants or juniors. Inspectors and advisers with the greatest experience of observing i.t.a. in use generally evinced most approval, while those who had seen little of it in practice were more likely to condemn it. Inspectors and advisers who were well acquainted with i.t.a. but who were doubtful about its overall value, rarely had doubts relating to children in their first year or two of schooling."

Each "doubt and reservation" thus needs to be evaluated in the light of the "proximity" or "distance" of those who hold it.

K. "Some at least of the resistance to change lies in a rooted unwillingness to study the evidence." Secondly in studying these doubts and reservations should be noted the Joint Statement which was made on the publication of the Schools Council Report by the Dean and Director respectively of London University Institute of Education and of the National Foundation for Educational Research. (See p. 36 Att. B, from which this heading is an extract.) Doubts and reservations which are no better than opinions, in conflict with the evidence, may be ignored.
That Joint Statement is also relevant in that there can be little future for educational research if findings such as those quoted leave head teachers so little moved, and classroom theory and practice unaltered. If research is not followed by development, why research at all? Why depart from the behaviour in the days when, in the words of Dr. Wal—

"innovations ... escaped objective study and, if evaluated at all ... (were) assessed mainly on partisan opinion. Faith rather than science has been the guide."³

Partisan opinion is a very defective Court of Judgment.

L. The 25 reservations and doubts.

(a) The Child:

(i) That the new medium differs significantly from T.O. (This is No. 1 of the "main disadvantages"—Para. G (ii) B, p. 19.)

This is not so—at any rate from lower-case T.O.—as will have been seen in Part I, Fig. 1, p. 11. In truth, i.t.a. is able to be both a wholly reliable systematization of lower-case T.O. for learning, yet insignificantly different from T.O. for reading—and to differ very much less than the three different alphabets of T.O., which begin: A, a, α; B, b, β; etc. Individual handwritings differ radically from one another and even more radically from upper-case or lower-case T.O. in their myriad forms of handwritten words, even when written by those with easily legible handwriting. Thus even supposedly important differences in shape—such as th and ð—so helpful in the learning stages—do not signify in reading once reading has been learned, because they are comprehended so effortlessly that the reader is not even aware that they are real differences⁴. With 24 characters the same as in T.O., and with the digraphic monographs (such as ð designed to resemble t plus h) there are in i.t.a., few differences—and very few of them at all radical⁵.

(ii) That the child has to unlearn what he has learned when he comes to the transitional stage, and that the transition presents difficulty. (This is related to Point No. 2 of the "Main Disadvantages", Part II, Para. G (ii) B, p. 19.)

Nothing is unlearned, and the child—if he is able to read in the new medium fluently and with understanding—experiences

³ "The i.t.a. Symposium", by Professor John Downing (NFER 1967).
⁴ So easily comprehended are the five different shapes AND, And, and, and, &. That it is very hard to persuade any literate man that the first four are as different from one another as each is from the ampersand. Eventually in the process of reading they come to be treated as identical, and even believed to be identical.
⁵ See Part I, Fig. 1, p. 11.
no difficulties. In support of this consult any experienced i.t.a.
teacher, and see III—The Transition in Reading (pp. 60/65).

(iii) The child has many more characters to learn.
In fact he has many fewer to learn with i.t.a., since none of
the many variant upper-case and cursive characters are pre-
sented to him. Moreover, where T.O. presents the learning child
additionally with very many digraphs, in order further to supple-
ment its already 82 characters, i.t.a. presents only 20 augmenta-
tions in addition to 24 characters taken from the lower-case
T.O. alphabet. For instance, the child needs to learn very many
T.O. digraphs as well as the total 82 of the three T.O. alphabets
—such digraphs and trigraphs as—ie, in die; —igh in high and
light; i consonant e in hide, ride, time; —uy in buy; is in island;
as well as up to 29 other variant characterizations for that one
sound alone. He needs—in i.t.a.—to learn only ie There are, in
fact, over 2,000 different characterizations in T.O., whereas in
i.t.a. there are only 44. The beginner therefore has incomparably
fewer characters to learn.

(iv) The child is less able to read what T.O. he sees outside the
classroom, and is confused by the—to him—different medium.
(This is raised in points 1, 2 and 4 of the seven “main dis-
advantages” of i.t.a. (Part II, Para. G (ii) B, p. 19) and Point 3
in the “remaining disadvantages”.)

At any given stage in his progress in learning to read in any
systematization of T.O. such as i.t.a., he is able to read more—
not less—of those words which he will see outside, because his
early progress has been so much more rapid. In i.t.a. many of
these words are the same as in T.O. (some 40% in a newspaper
or book). A further 40% of words are virtually unchanged, such
as with hip etc., which differ so insignificantly as to be immedi-
ately legible. Thus i.t.a. enables him to make yet faster progress,
so that he becomes able, far sooner than the T.O.-taught child,
to read and write all such regular and relatively regular words.
Admittedly he may have to skip a few words when they appear
in upper case or cursive, and to skip also the very irregular words
—the “shockers” such as once—but so too does the T.O.-taught
child, even after a longer period of learning. In either case no
beginner is expecting thus early to be able to read every word
which confronts him; meanwhile the i.t.a. child is more than
delighted by his evident success with the many words he can
read. He will be a better reader in T.O. if he moves to a T.O.
school.

Furthermore, the child taught with i.t.a. gets more help from
context for those shockers than does the T.O. child, since he is able to read more of the words on either side. Vera Southgate has little sympathy with this "disadvantage", and furthermore points out that "children are much more adaptable than adults usually suppose" (p. 159).

(v) The child is confused when his parents move home and he moves to a school which does not use the new learning medium. (This is Point No. 4 in the Main Disadvantages (Part I, para. G (ii) B), p. 19 and No. 1 of Remaining Disadvantages (p. 157).)

The answer here is very much a re-statement of what has been said in (iv) above. The new medium is specially designed to be as close to T.O. as is possible having regard to the need to systematize T.O. Thus the new and the old media are sufficiently alike for a transition to be easily made—at the stage (whether advanced or not) appropriate to the child's progress. Because the stage—reached at any time—is a more advanced one than the child would have reached had he been taught in T.O., he will be more advanced in T.O. at the time of joining his new school, by reason of that more rapid rate of progress in his early weeks and months. In other words, he makes his transition, and that at a higher success in reading T.O. than he would otherwise have achieved.

(vi) The child has difficulty in forming new characters.

Rather is it among some of the 24 retentions that difficulty arises for the absolute beginner in handwriting. The control of the pencil point is a sophisticated skill when it needs to maintain the distinction between e and c, and between both and o. The characters b and d present considerable confusion; equally h, n; u, n; v, y need special care. On the other hand the i.t.a. forms for sh and th (ʃh ɽh ɿh) and the rest have been found in practice to make no special demands.

It is, rather, in the minds of adults who have not yet written the new characters—particularly among those who have doubts—that any pre-supposed special difficulty arises over the new characters.

The children have no pre-judgments, and write very much earlier—and prolifically,—because writing and spelling are found by them to be so very easy. Very early in their learning they can write anything they say—and they do! There can be little difficulty in forming the characters, seeing how much more freely they write—and how much sooner.

(vii) That the child's spelling is made even worse.

For a time after the transition in reading, most teachers allow
their children to write freely, as they have been writing in the past. During the first year after the transition the child's spelling continues to be more rational than orthographic. However, thanks to plenty of reading in T.O., the child is all the time learning still more and correct T.O. spellings, and emerges during the year after the transition actually a significantly better speller than the T.O.-taught child. See "But will they ever learn to spell correctly?" (See p. 50 Att. G) reprinted from the June 1972 issue of "Educational Research", in which: —

"The results for (18) second-grade comparisons show. . . . First, there is no study with either total or sub-group comparisons suggesting that i.t.a. children spell significantly more poorly at the end of second grade. Five studies show no significant difference when total populations are compared. . . . However, 11 studies show i.t.a. children spelling significantly better than their counterparts for whom T.O. was the medium of instruction . . . no study using sub-group comparisons found advantages for T.O. children over i.t.a. children in spelling in T.O."—p. 174.

There are a number of reasons for this improvement, of which perhaps the separation of the task of learning to read from the task of learning to spell orthographically is worth mentioning. The i.t.a. child has the advantage that he begins to learn so to spell only after he has learned to read in T.O. Another important reason is the higher motivation to learn "grown-up spelling", as well as the clear indication of which of the words he reads in T.O. he needs to learn. They are not many—only some 10% of the different words he will need to learn. The majority of the rest are either regular (as but, did, toe, etc.) or regularly irregular (as road, boat, goat, float; blow, show; or home, alone, hole; etc.

(viii) That the T.O. child catches up.

This criticism of i.t.a. is expressed in the second of the two qualifications which immediately follow the two assertions by Professor Warburton (pp. 234/5), and it is one which is widely voiced. Here are the two assertions each with its qualification.

1. "There is no evidence whatsoever for the belief that the best way to learn to read in traditional orthography is to learn to read in traditional orthography."
   Qualification: "On the other hand, the evidence is not convincing that i.t.a. is the superior medium after the transition to T.O."

2. "It would appear rather that the best way to learn to read
in traditional orthography is: to learn to read in the initial teaching alphabet.”

Qualification: “The results obtained when the children are pursued into the third year suggest that the T.O. groups catch up. We must await the findings of other researches, particularly Downing and Jones (1966), to obtain more conclusive evidence” (p. 235).

The first of these is no reservation, since the intention of i.t.a. has never been to be used after the transition; the second is true of some T.O.-taught children but not of many others.

It has been only the best infants—and only some of them—who have caught up. The others do not catch up during the third year (See p. 50 Table 19 (ii), p. 264: Attachment H). Moreover, in that year far more of the T.O.-taught children are to be found (See p. 52 Table 19 (b), p. 265, Attachment J) in the bottom half by all four separate tests. Furthermore, the investigations of Dr. Joyce Morris* show that these T.O.-taught children who have not succeeded by the third year, do not catch up, even in the fourth, fifth or sixth year.

So far as those who did catch up are concerned, there is surely no other field in which educationists would accept being less successful in teaching infants on the grounds that it did not matter, since they got there—or at least the best of them got there—in the end!

It may moreover be reasonably suggested that even those T.O.-taught children who catch up have nevertheless missed a great deal which is not measurable in educational terms, but is probably precious. Self-learning and self-dependence—the sense of achievement—are a good foundation for a happy school-and after-school-life. The best T.O.-taught children never succeed as quickly as the best i.t.a.-taught children; the worst T.O.-taught children fail even more dismally.

(ix) That it helps the quick learner, but not the slow.

The paper by Professor John Downing (“Is i.t.a. best for dull or bright children?” in the Proceedings of the Sixth International i.t.a. Conference, York, 1969) is the relevant answer. He re-assessed the evidence in his two researches, and reported that while i.t.a. was outstandingly helpful for the quick learners, it had significantly helped even those in the lowest decile also—and in doing so he withdrew his earlier conclusion that there had been no significant improvement for the slowest learner. The improvement was not very large among the worst of the lowest

* “Standards and Progress in Reading”, by Dr. Joyce Morris (NFER 1966).
decile; after all, the worst 5% contains those who succeed barely or even not at all—and clearly there can be little difference possible when the scores approach zero. Very many children who would otherwise fail altogether, and would remain failures, achieve the degree of success appropriate to their language skill.

(x) That it helps the slow learners, but not the quick.

This is the converse of the misapprehension discussed in Para. (ix) above. The joint research of London University of Education and the NFER showed the greatest improvement of all among the quick learners. After only a year, 5.7% of the i.t.a. children had completed Book V and were reading in T.O., whereas none of the T.O. children had completed Book V. Similarly, while by then 20.6% of the i.t.a. children had reached Book IV and beyond, only 3.3% of the T.O.-taught children had reached Book IV. (“The i.t.a. Symposium”, Table E.1, Attachment A p. 35.)

(b) The Teacher:

(i) That schools soon revert to T.O. and do not stay with i.t.a.

The Schools’ Council Report (Warburton and Southgate) begins with a report on the number of “schools containing infant pupils” (p. 9) using i.t.a. as at June 1966. The total from the questionnaires received was 1,554—9.2% of such schools in England and Wales.

It proceeded to report (pp. 10 and 11) the number of such schools reporting that they had “discarded i.t.a.”. There were only 32 such schools (2% of 1,554). Five Local Authorities representing nine of those schools forwarded the reasons when sending their returns—all of which indicated “that the abandonment of i.t.a. was not due to dissatisfaction with the results of using the alphabet” (p. 11). Two Authorities noted as reasons, “Discontinued because of changes in head teachers”—which remains today the principal reason for discontinuance. Vera Southgate visited the L.E.A’s of the remaining 23 schools from which no reason had been given, and concluded that:

“Nevertheless at the end of 1966 it was quite clear that only a negligible number of schools had returned to the use of T.O. with infants after using i.t.a. for reasons other than administrative ones” (p. 11).

The graph at Attachment K is taken from the paper by Professor John Downing to The World Mental Health Assembly, Washington, D.C., November 1969, recently reprinted in “Literacy Discussion” of The International Institute for Adult Literacy, Vol. III, Nos. 3-4, Sept.-Dec. 1972. It shows how, after 14 years in school, there were significantly fewer i.t.a.-taught children than T.O.-taught children who scored (in four tests) zero or 1-4. (See p. 53.)
This canard—that i.t.a. does not stay—is spread widely by publishers’ representatives. The growth of i.t.a. has been steady, albeit slow, since June 1966. The estimate (many Local Authorities do not have reliable figures, do not seem interested to find out the statistics, and rarely know) is that the incidence in infant schools is today of the order of 15%.

Nevertheless, such hostile assertions tend to be believed, and to be spread, thus slowing up the general acceptance.

(ii) The teacher has to unlearn how to teach, and to learn afresh. Replacements needed for changes of staff are not available.

Local Authorities organize one-day workshops. Indeed, a one-day’s workshop is all that is necessary to learn how to use i.t.a.—other than conviction that the new medium must be given a fair trial. Even supply teachers have been known effectively to depute for an absent i.t.a. teacher. This “reservation or doubt” is particularly illuminating in that it emphasizes how everything a teacher has learned at College, or by his experience in teaching, loses nothing but gains in relevance when operating in a medium which is consistent for look-and-say and for every other method of teaching. The words in the sentence given in Part I, Fig. 1 on p. 11: “... that there are far greater departures within T.O. than”—when printed in all three alphabets of T.O., show how greatly T.O. varies and prevents the look-and-say method from being the exercise in repetition and reinforcement which it is intended and supposed to be. In T.O. variety breeds confusion, and confusion negatives reinforcement.

Furthermore, the teacher who uses i.t.a. is able to operate ideally no less in the phonic method, because i.t.a. is infallibly consistent in its character-to-sound relationship, and allows the phonic method to be an exercise in rationality. No longer does the digraph ea in great represent varyingly seventeen different sounds, or the spoken word /wuns/ misleadingly appear as onky, etc.

There is thus nothing for the teacher to unlearn. Every method, every experience, remains as applicable to i.t.a. as it was to T.O.—only more so! All the teacher needs is to learn to spell alphabetically when he has learned the 44 characters and

8 There is no word in T.O. which has fewer than three variant forms. This makes the look-and-say teaching method far from repetitive and reinforcing. The indefinite article has three variants—A, a and u—and words such as bag have ten variants. Others with more characters have even more.

9 The Shorter O.E.D. gives as differing the pronunciations of ea in great, leaf, bread, heart, earth, sergeant, guinea, azalea, cereal, create, idea, ocean, rearm, real (the coin), reality, rear and roseate.
even without a one-day "workshop" or a correspondence course.

(iii) That good teachers don't need i.t.a.

No teacher is so good that a child should be required to learn the hard way.

Among the now tens of thousands of teachers who have tried and succeeded with i.t.a., there have been at least the normal proportions of really competent teachers—indeed, brilliantly competent teachers. They are among the most enthusiastic because they find themselves so very much more successful than they used to be when needing to overcome the illogicalities of T.O.

(iv) That it has been the enthusiasm of the teachers—not the merit of the new medium—which has obtained the otherwise inexplicable better teaching results.

This is a confusion of effect and cause. The enthusiasm is the effect, not the cause, of finding the teaching of reading so much more successful and exciting than it used to be. But even if that enthusiasm of the teacher is heightened by a Hawthorne effect (surely the effect does not last for up to eleven years?) the benefit is to that extent real, and to be welcomed as yet another advantage of the changeover. Is there any evidence yet that children aged 5 and lower are susceptible to the Hawthorne effect?

(v) That teachers are induced to neglect eclectic methodology because the approach is exclusively phonic.

As stated above (Part II, Para. L (b) (ii), p. 27), i.t.a. is much more effective than T.O. for whatever method or methods may be favoured by a teacher.

This fact, however, in no way inclines a teacher to prefer any one method over another—whether phonic, look-and-say, a writing approach, etc., etc. Rather does it encourage the teacher to employ the full panoply of methodology, and not to be a "single-method teacher". There are many T.O. teachers who believe and propagate this canard.

(vi) The teacher is embarrassed when children are "transitioning" at intervals, while there are children needing both media. (This is No. 2 of "Remaining Disadvantages" (p. 158).)

This may well be a difficulty for the teacher in his early days, but he soon develops the necessary techniques. The child who has "transitioned" is in no way harmed by what he sees in i.t.a. He reads with indifference anything he sees, whether in
i.t.a. or T.O., upper-case, lower-case, or even cursive upper- and lower-case.

Many teachers use yellow paper and yellow chalk for all their i.t.a. classroom displays and prepared work, and white paper and white chalk for all in T.O. The children eagerly sort themselves out in relation to their needs.

Vera Southgate reported that teachers welcomed i.t.a. as ending the "long uphill grind". (Para. G (ii) Point A. 11, p. 18 hereof.)

(vii) The child—particularly the slow-learning child in the "top infants"—may be unduly hastened by the teacher to make the transition in reading. (This is Point 5 in the "main disadvantages"—See Part II, Para. G (ii) B, on p. 19.)

This is not relevant to the changeover to a systematized medium—only to the practices of the teacher in using it. Any medium is subject to abuse as much as use, and this abuse—which fortunately is becoming less prevalent as i.t.a. has become better understood—is not inherent in a new and better medium itself. Moreover the slow learner aged seven plus, is just the child who would have arrived at the junior stage a clear reading failure had he been taught in T.O. Such a "slow learner", by making better progress in reading, writing and language, thanks to the easier medium, is more advanced—not less so. A Junior head is falling down in his duties if he does not encourage the learner to continue with the very much simpler medium. To otherwise is to throw in at the deep end a learner who cannot yet swim—and for the slow learner, to take away his arm-floats and other aids which might help him.

(c) The Parent:

(i) The parent is unable to help. (This is point No. 3 in the "main disadvantages"—Part II, Para. G (ii) B3 on p. 19.)

Any parent who can read T.O. can read in the new medium: no coaching at all is needed. If the parent of an i.t.a. child wishes to help the child in writing also, a four-page leaflet is available. The child, however, will "take off" on his own, and will write copiously as soon as he has mastered the characters with which to represent any sound in his speech. He then needs no help. The parent thus should read—and read often—from an i.t.a. book which the child can also see. He has no need to learn to write.

(ii) **That my child ought not to be used as a "guinea pig"

This proposition was, naturally, the first concern of London

** This paragraph was not in the copy of the evidence submitted, but has been added since.
University Institute of Education and the National Foundation for Educational Research when they decided in 1960 to carry out the research "whether the irregularity of application of the English alphabet was a serious handicap in learning to read". They were able to command the advice of their most authoritative staffs, and were convinced that there was no danger to the child. Moreover, they were aware of sufficient earlier evidence not only in Britain but also in America.*

Since then several million children and tens of thousands of teachers have proved the validity of that conviction—indeed they, and the results of over 80 researchers, confirm that parents may be assured that i.t.a. is certainly no longer in an experimental stage, and that children will be benefited and not harmed by the use of a systematization of T.O. which, incidentally, is so used in all countries of the English-speaking world. It is important, however, that head teachers should take steps to inform the parents of on-coming children before their children begin attendance. Leaflets are available from the i.t.a. Foundation, and there is a helpful and very attractive film for projection at a parents' meeting which will help heads in explaining and (more than) justifying their decision. If such steps are taken there will be no suggestion that children are "guinea pigs". After all, even in 1961 when there was none of the present overwhelming evidence in favour of the change-over, parents (with negligible exceptions) concurred, and were soon enthusiastically behind the school when they found their children reading and writing effortlessly and soon.

(d) General:

(i) *i.t.a. is not a panacea*\(^1\)

This supposed reservation is no reservation, for the claim has never been made. Indeed, from the outset i.t.a. has never been offered as a panacea, but as a sensible means of overcoming the handicap of an irrational medium. Southgate reported that i.t.a. helps all kinds of children to learn more easily and happily, and that it helps teachers (again of all kinds) to do their job more efficiently. There is a lot more to learning to play billiards than a change from Gilbert's "twisted cue, a cloth untrue, and elliptical billiard balls". Having a medium apt for learning to read,

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\(^1\) "IV—The Final Word": "It would be unfortunate if the mainly favourable tone of this report was taken to imply that the use of i.t.a. for beginning reading with infants was the final and only solution." "i.t.a.: An Independent Evaluation" (p. 284).
and having the adequate equipment for learning to play billiards, never can be “the final and only solution” to acquiring the desired skill.

(ii) That i.t.a. is only a “gimmick”. There are all our well-tried methods which, if properly applied to T.O., will get as good results in T.O., if not better.

This assumes that T.O., created as an expediency 600 years ago, is so perfect a medium for beginning learning that it cannot be improved.

This is a typical example of the confusion of medium with method. The merit cannot lie in the “method” when it is the “medium” which is at issue. After all, any existing method can be applied not only to T.O., but also to any new medium. What matters is what method best suits each learning situation, and—more important—what medium best suits well-known methods. Those well-tried methods, if they are good for teaching with T.O., will become even more effective in i.t.a.

Familiar methods have failed with so many children when using T.O. that it is obvious that the medium should now be changed for one which has been proved to be more efficient. The assumption is tacitly but wrongly made that if these old “well-tried methods” were to be used with T.O., spectacularly better results would be achieved. It may be asked: why, then, have they not been applied, and why has the record with T.O. been for so long one of distressing failure for so many children? (See p. 49 Attachment F.)

(iii) That the variety of books and apparatus is insufficient. (This is Point No. 6 in the “main disadvantages”—see Part II, Para. G. (ii) B. on p. 19—and No. 4 in the “Remaining Disadvantages”.

The variety in i.t.a. is more than sufficient for the quick learner. There are, in fact, over 2,000 individual items from which a choice may be made. However, here is a problem in which there arises the need to differentiate those children who are linguistic enough in oracy to learn quickly, from those who are not so fortunate and are deficient in oral language. Those at the better end of the linguistic spectrum make their transition to T.O. having read only a fraction of what is available in i.t.a., and thereafter have the full range of T.O. books from which to choose. The problem of any shortage of titles is thus confined to the children at the worse end of the language spectrum. For them it has been a case of using i.t.a. not so much for teaching
them reading only, as for teaching them simultaneously both oracy and literacy.

In the early days of i.t.a. from 1961 to 1966—the years during which the oral evidence for the Evaluation was collected—the many fewer than 2,000 items then available were found to be adequate for sufficiently improving the language deficiency of apparently 30% of the total population—those who would have failed in T.O. but were able to succeed when taught in i.t.a. (See p. 35 Attachment A: After 2½ yrs.: Difference in total between i.t.a. and T.O. in the first three lines.) Vera Southgate makes this point at p. 160, and that there are now many more titles from which to choose. The supply of i.t.a. books is alleged to have been insufficient for the remaining 15% who were still not out of the i.t.a. edition of Book III in “Janet and John” after 2½ years of effort. But those are the very ones who could not benefit from them. They cannot yet read even half the books.

These children from the two bottom deciles are those whose needs are to learn language, and it is probable that what they need is not so much more i.t.a. books, as some new and structured approach for learning their mother tongue—as recommended in the White Paper. As the new language-teaching techniques will be developed in future, and come to succeed, the already wide choice of i.t.a. books will be more than sufficient for them, as it has been for those who came to school with good skill in English.

Meanwhile publishers are being encouraged, with some success, to add to the already wide variety of choice of books in i.t.a.

(iv) The quality of the books in T.O. as well as in i.t.a. is not high enough, nor the supply adequate for expanding reading ability. (This is Points No. 6 and 7 in the “Main Disadvantages”, Part II, Para. G (ii) B, on p. 19.)

In the intervening six years since the Schools’ Council Report, a lot has been learned by teachers and publishers. Demand for the early reading books (which were just a transcription of the edition designed for T.O.) has diminished, and other such earlier books are being allowed by their publishers to lapse.

11 “Firstly it should be noted that those children who learned to read so easily with i.t.a. in the first few years, did so with a much smaller selection of reading materials than is now (1966) available... the supply of reading materials in this medium is bound to increase.”

12 As against these 15% i.t.a.-taught children, there were 45% of the T.O.-taught children not out of the T.O. edition of Book III. (See p. 35 Attachment A.)

13 See Part I, Paras. 31 and 32, pp. 13 and 14.
As soon as—and even before—a learner has sufficient language and reading skill to be in need of expanding his reading ability, he will have made the transition. Furthermore, any criticism of a lack of adequate suitable books in T.O. is not a reservation about i.t.a., but a criticism of authors and publishers of books in T.O.

(v) That the move to a new medium away from the old has been based not on genuine educational research and classroom experience, but on the "big drum" of public relations and the desire of those who seek to climb on a popular bandwagon.

This hardly needs answering, save to point out that the difficulties of such a change are so great that no progress could have been made had not the advantage found by teachers proved to have been very great indeed, and had not every opportunity and occasion been taken to bring to the attention of all concerned the possibility that a medium evolved fortuitously 600 years ago might be a cause of difficulty to the learning child of today.

It was (and still remains) a unique happening for such an educational innovation to be started by submission to any research body. The Press, television, and general publicity were self-generating—and inevitable.

(vi) The "commercial smear"—that there is a lot of money to be made out of the sale of books written and published for the teaching of reading.

The fact that profits can be made is no truer of publishing in a new medium than of publishing in T.O. Indeed, the profit opportunities are clearly far greater when publishing in a medium which is universally popular. Furthermore, the costs of setting up the new and of scrapping the old eat away profits, and it is a long time before the innovating publisher can hope to recoup his outlay.

Indeed, the costs of the i.t.a. Foundation in popularizing the concept of systematizing T.O. for the benefit of the learning child—even after accepting the very considerable legacy from the late Eugene Kelly—have been enormous. The Pitman family, from Sir Isaac in 1843 until the present day, have suffered—not gained—financially: suffered, indeed, to a very great degree. Moreover, there is no one who has attempted to promote any other I.L.M. who has not lost financially.

The gift of the copyright in the use of i.t.a. to the public is further indication that my motivation has been, is, and will be, one of devotion to a cause—not a money-seeking one. My grandfather too—from 1843 (when he produced his first initial teaching
alphabet) until his death in 1897—was similarly devoted, similarly single-minded, and similarly greatly out of pocket.

**M. Summing up.** At present the traditionalists naturally outnumber the innovators, but their evasions, reservations and qualifications are shown to be rooted in prejudice and a resolute refusal to face the facts, produced by independent investigators. It is easy to rationalise inertia, but the evidence submitted here should remove misunderstanding and all excuses for inaction. A balanced judgment according to the weight of the evidence is all that is asked, and can hardly be denied.

**N. Conclusion.** The conclusion to Part II extends further the conclusion at the end of Part I (Para. 34 on p. 15) that an I.L.M.—a systematization of T.O. which nevertheless closely resembles T.O.—is essential to success in teaching literacy in English. The Initial Teaching Alphabet is seen to stand up to all that is required in such an I.L.M., and, indeed, to strengthen greatly the case for the principle of systematizing T.O.
## PROGRESS IN READING BASIC READER SERIES

Percentage frequency distribution of reading primer reached

<table>
<thead>
<tr>
<th>READING PRIMER REACHED</th>
<th>AFTER 1 YR.</th>
<th>AFTER 1½ YRS.</th>
<th>AFTER 2 YRS.</th>
<th>AFTER 2½ YRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exp. (i.t.a.)%</td>
<td>Cont. (t.o.)%</td>
<td>Exp. (i.t.a.)%</td>
<td>Cont. (t.o.)%</td>
</tr>
<tr>
<td>Non-starters</td>
<td>6.6</td>
<td>5.2</td>
<td>2.2</td>
<td>0.3</td>
</tr>
<tr>
<td>At Books Intro., I or II</td>
<td>55.0</td>
<td>75.9</td>
<td>28.8</td>
<td>54.5</td>
</tr>
<tr>
<td>At Book III</td>
<td>17.8</td>
<td>15.7</td>
<td>12.8</td>
<td>17.2</td>
</tr>
<tr>
<td>At Book IV</td>
<td>10.9</td>
<td>2.8</td>
<td>14.5</td>
<td>13.3</td>
</tr>
<tr>
<td>At Book V</td>
<td>4.0</td>
<td>0.5</td>
<td>8.1</td>
<td>7.2</td>
</tr>
<tr>
<td>Beyond Book V</td>
<td>5.7</td>
<td>0</td>
<td>33.6</td>
<td>7.4</td>
</tr>
<tr>
<td>N</td>
<td>651</td>
<td>651</td>
<td>580</td>
<td>580</td>
</tr>
<tr>
<td>Median Primer Position</td>
<td>Intro., Intro., IV Intro., Beyond III Beyond V IV</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kolmogorov-Smirnov¹ (one-tailed) test χ² (2 d. of f.) Per cent. level of significance Superior Group</td>
<td>49.51</td>
<td>92.71</td>
<td>85.02</td>
<td>90.21</td>
</tr>
</tbody>
</table>


² Ibid., pp. 30, 56.
PRESS RELEASE

Statement on behalf of the University of London Institute of Education and the National Foundation for Educational Research

In October 1960, the University of London Institute of Education and the National Foundation for Educational Research jointly sponsored a major series of researches into the efficacy of i.t.a. as a teaching medium.

From the work done by the Reading Research Unit set up in the University of London Institute of Education, and from the evaluations of that and other work reported in the i.t.a. Symposium and i.t.a.—An Independent Evaluation*, two findings clearly emerge. The first is that the medium has substantial advantages over traditional orthography in the early stages of teaching children to read. The second is that attention has been drawn to the great need for exploring further through research and experiment the critical two or three years in which children are taught reading.

Beyond this, however, lies another problem which concerns the role of research in determining policy. Some at least of the resistance to change lies in a rooted unwillingness to consider evidence. Few other areas of educational method have been as well and thoroughly explored as this. We would therefore urge teachers and others responsible for the important decision as to how and by what means reading should be taught, to examine the evidence and to recognise that on what they decide depends the welfare of countless children—especially those who have difficulties.

* N.F.E.R. Slough, 1967
The purpose of my attendance at this conference is to report on the findings of five years' use of i.t.a. in the British Army with adult backward readers at the School of Preliminary Education. However, since few of you will be familiar with our work, it is necessary for me to describe briefly the organisation and work of the School, its purpose and place in the Army. You will then understand the context in which i.t.a. was used.

The School of Preliminary Education (referred to as "SPE" for brevity) is a unique establishment. There is no comparable civilian institution, where an average of 110 resident adults are undergoing full-time remedial educational instruction.

The existence of the School is a reflection of a very real national problem. Statistics from various sources, e.g. The College of Special Education, Gardner, Wall, the Department of Education and Science, indicate that no less than 20 per cent of school leavers may be classified as non-effective or backward readers, i.e. they have a Reading Age of 12 years or less. This disturbing fact must also be viewed against the changing demands of society in this increasingly technological age.

The SPE exists because in order to fulfil its many and varied commitments the Army has to accept recruits who are potentially good soldiers but whose educational standards are too low to enable them to benefit fully from normal military training. Most of the recruits in this category are infantrymen and they amount to approximately 10 per cent of the overall Army intake. Of this 10 per cent, some 15 per cent are men with a reading age of 8 years or less.

The aim of the School as defined in its charter is to provide an 11-week course for those soldiers who require special tuition to raise them to the educational standard necessary to enable them to benefit fully from normal training and to fit them to carry out the duties of their Arm or Corps. By improvement of their skill in reading, writing and number, they will be encouraged and given the opportunity to reach the highest standard of which they are capable as trained, soldiers and tradesmen.

In simple terms the School exists to assist in making soldiers out of men who would otherwise be unacceptable. Whilst the School is, therefore, an integral part of the training organisation of the Army our work has an undoubted welfare and citizenship value.

The nature of the task confronting the School is better appreciated when one realises how little is known about the remedial education of adults in the civilian educational world. All the problems of teaching
methods, general approach and production of suitable materials have had to be solved within the School by means of trial and error.

Recruits are eligible for a course at the School if their reading age is less than 11 years or if they have a significant weakness in number. Selection is carried out by the School and intakes of approximately 34 students with varying degrees of ability or disability assemble every fortnight. Every intake is divided into two classes, each with its own officer instructor who remains with that particular group for the whole of the 11-week course. The success or failure of the course hinges on this intimate officer/student relationship.

The weekly timetable includes periods of drill, physical education, games, religious instruction and hobbies. The amount of actual educational instruction is about 20 hours per week and for this there are no set syllabuses or standardised lessons. How this time is spent is largely in the hands of each instructor who works on the premise that every student presents a particular problem which must be diagnosed and dealt with individually. The widest possible variety of teaching aids and materials is provided to allow full scope to the needs of each student. Great emphasis is placed on the need to know the man as an individual as well as an educational problem.

What kind of person is the student and what circumstances have produced his backwardness?

A widespread misapprehension exists that the SPE student is an illiterate. This is not the case because illiterates are not accepted in the Army. It is true to state, however, that the majority suffer to a greater or lesser degree from a sense of failure, frustration and lack of self-confidence and that they are educationally backward.

Rarely is it possible to name one specific factor responsible for the backwardness, but a multiplicity of factors have interacted and produced low morale. An appreciation of the interplay of the intellectual, physical and environmental factors involved in the personality development of every individual is vital to an understanding of the educational problems which face the instructor.

It is undoubtedly the case that many of these men who were backward at school and a further proportion of them who were below average (but not backward in the technical sense) tend after leaving school to show a steady deterioration in all the subjects of the elementary curriculum—particularly in reading and spelling. Even though many of the adverse factors may be removed on leaving school the backward child will generally develop into the still more backward adult.

The great majority of the students come from socially and culturally poor and deprived homes. Most of them come from the unskilled labouring classes and an estimated 50 per cent are from large families with four or more children (families with as many as 16 children have been
known). Some of these men have lived in overcrowded conditions where there has been a consequent impoverishment of the whole background of family life, inadequate sleep and nourishment.

About 35 per cent of students are from broken homes (i.e. where there has been a death of one or both parents, a divorce, separation, or where there were no known parents) and the majority of these suffer from some form of emotional difficulty.

It is estimated that about 30 per cent of students have a history of significantly interrupted and discontinuous education. This has resulted from frequent changes of school, prolonged ill health and in 25 per cent of cases, truancy—the latter reflecting emotional difficulties and educational failure.

Very few have shown any purpose in the use of their leisure hours and, due to their narrow and deprived upbringing, are content with an interest in "beer and birds". They live from day to day and very few see any reason to look or plan beyond the very immediate present. The grasshopper nature of their lives and lack of perseverance is apparent in the numerous changes of employment experienced by the majority of students after leaving school. Few students have remained in one job for more than three months. Some claim to have had as many as seven or more jobs before enlistment and often the reason given for these changes is "To better myself" or "More money". The fact that their aims have seldom been achieved only emphasises the sense of failure and also brings home the way in which educational backwardness restricts an applicant to unskilled work or casual labour.

The majority are youthful and immature, physically and mentally underdeveloped, unsure of themselves and uncertain of their future. They have joined the Army as yet one more attempt to find security and to try to establish an identity.

It is not surprising, therefore, that many students are overwhelmed by a sense of failure, feelings of inferiority, frustration and lack of self-respect, and that many have lost all confidence in their ability ever to succeed at anything. The emotional aspect of this is of the utmost importance because this accumulation of failure and frustration has, in many cases, stunted the development of their personalities and becomes a persistent and all-pervading part of their adult life pattern.

Some of the problems of social maladjustment are resolved on or soon after enlistment. The soldier has found a "father-figure" in the Army and a home and sense of security.

The educational problems posed by these soldiers are concerned principally with backwardness in reading, comprehension and spelling and, to a less extent, with backwardness in arithmetic. The greatest problem, however, is in motivating these men and creating a desire to know.
It would be futile to pretend that the School can remedy in eleven weeks the inadequacies remaining after ten years' schooling. We do endeavour, however, to set these men upon the road to further progress by inculcating a sense of confidence (fostered by success) in their own ability to succeed, and by stimulating their curiosity and initiative. We try to give them practical experience of the solution of problems relating to the art of "living"—not only "living" as a soldier but also as a normal and useful member of society. We endeavour to foster a more creative use of leisure and give them a chance to try their skill at a wide selection of extra-mural activities.

How then does i.t.a. fit into this particular background?

You would not be attending this Conference if you were unaware that communication is the life-blood of our society. In the military field, however, inadequate and ineffective communication can literally spill life-blood; the life-blood of friends, allies or comrades.

There is at the SPE one particularly backward group of students—the bottom 10-12 per cent of our population whose reading age is eight years or less—who present the greatest challenge; the students whose morale is the lowest and who are likely to have the greatest antipathy towards education. The problem is what should, or can we do in an 11-week course with that type of man.

Struggling with this type of man, it became obvious that there was a significant psychological barrier to be overcome since we were not offering anything new or untried. It was increasingly apparent that for pupils of limited ability the inconsistencies of T.O. presented a recurrent stumbling-block, and also that this inconsistency and the confusion which it created had considerable adverse effect upon their motivation.

Over five years ago, therefore, we decided to investigate the potential of i.t.a. as a remedial reading medium for adults. We decided to do so because i.t.a. has:

1. a complete stability of visual pattern (it is wholly lower case);
2. the simplest form of sound/symbol relationship.

In addition, for the despondent case of reading failure:

1. it has a distinct psychological advantage in that it is entirely new;
2. a backward or partially successful reader is already familiar with 24 of the 44 characters.

We approached the experiment with some trepidation since the alphabet had been designed initially as an aid to reading in the infant stages and with an open mind in the following questions:

1. Was it practicable to use i.t.a. as a remedy for disability in reading and reading failure in adults?
If this medium proved successful as a therapeutic measure, would the dull adult then be able to effect the transition to reading in T.O. successfully?

What effect, if any, would the use of the medium have on the overall attitudes and on the reading habits of these men?

One problem which arose before any experimentation could commence concerned the type of reading material available in i.t.a. All the commercially produced readers were designed for use by very young children and which we, unlike Sir James Pitman, felt were highly unsuitable for adults and which would only create further antagonism towards the learning situation. We thus prepared our own, as we thought, highly exciting stories based on war heroes, battles, etc.

The first week of the experiment provided our first significant finding, which was something of a major shock, since it was somewhat disconcerting to discover that the majority derived considerable enjoyment from reading "Goldilocks and the Three Bears", "Snow White", etc., discovered for the first time through the medium of i.t.a. We frequently find that "Goldilocks" is considered to be a rather funny and sexy story!

The men enjoyed reading any matter which they were able to master and understand. What is vitally important to them in the early stages is not the content but a comprehension and mastery of the story so far; a feeling of confidence and competence in handling the printed symbol. The fact that a man can obtain such enjoyment from the simplest stories is yet further proof of the depth of his earlier cultural deprivation; that deprivation of language experience when someone should have been reading to him.

The next significant finding concerned that bête noire of i.t.a.—the period of transition. Our experience has been that not only is the transition achieved without any difficulty, and with little or no regression, but that the students make the transfer in their own time when they feel themselves ready for the change—it appears to be an almost unconscious act.

The backward adult, as opposed to the infant learner, is of course constantly making the transition in his daily routine, i.e. attempting to read newspapers, magazines, letters from home, etc. They are, therefore, reading and improving in T.O. all the time that they are acquiring confidence and fluency in i.t.a.

The experiment has shown that i.t.a. can play a substantial role in alleviating reading disability in disadvantaged adults and there is no doubt that a significant contribution to its effectiveness is the very early success rate which is achieved—it is quite usual for the most backward of students to be reading a simple story after two hours' instruction.
At the end of the first two years the mean reading gain of the very backward group (134 men) who had used i.t.a. was 26 months. This compared very favourably with a mean gain of six months for a control group of similar students who had used T.O. only and also, with the mean improvement of 15 months for the whole School.

These figures are more interesting when the potential of the two groups is compared. The mean IQ of the School population is 82 but in the i.t.a. group 29 per cent had an IQ below the scale minimum (i.e. 65) and the mean of the remainder was but 73.

In the first stages of our experiment we had concentrated solely in reading not only because of the limitation imposed by time but also the fact that a distaste for, and a fear of, writing is very common amongst such men. In 1966, however, we decided to see whether the use of electric i.t.a. typewriters by the student would enable them to communicate thoughts, ideas and emotions more readily.

The effect of these machines has been quite startling and appears to have released all the urge for communication which has been bottled up in these men for so long. Many were able to communicate with family and relations in an acceptable and legible form for the first time in their lives.

daer john & all,

i hope you are all kepping will, and firt.
i hope at you enhugny your holudag, on the 4, jul,g
i wen home and i, wen hap to your house do you are
no your holidag your muther sed at you am finished your mortor, bycle iforth you wooth am tining your mortor, bycle lis you on your holudag,*

Then followed another 38 lines in the same vein.

The letter illustrated above was produced by a young soldier in 1½ hours on the first occasion that he had ever used a typewriter in his life. It is interesting to compare this with the seventeen words he produced by hand in a 1½-hour attempt at writing home. Not one of the words made sense and he had no idea what he had written when he declared the letter finished.

You are now all saying to yourselves that much the same applies to a great deal of the above. That, however, is not the point; the vital point in this instance is that something has come out of the man on to the paper. The machine gave him confidence because the sound symbols were there to be seen; they did not have to be visualised and then painstakingly reproduced by hand from the visual image.

* While his machine had i.t.a. typewriter type printers do not. Thus T.O. has had to be substituted.
Above is a reproduction of a letter by one of our married students. This man, who was 25 years old, was totally functionally illiterate 7½ weeks before writing this letter. He had come from overseas and was unable to make any effective communication with his wife unaided. At the end of his course he was writing her two letters per day in T.O. and he also produced a book entitled My Life Story. His sense of accomplishment and progress were enormous. Simple and logical tools had changed this man from a depressed illiterate to a self-confident one able to express his feelings and personality through the written word. The type-
writer has not only provided him with greater technical efficiency but also has shown this to be more beneficial and effective in his personal relationship with his wife.

The first page of Chapter 9 is reproduced below and is interesting in that it shows that i.t.a. has worked itself completely out of his system by this stage in his development and has had no deleterious effect upon his spelling.

CHAPTER NINE

ONE YEAR PAST

On his ninth Birthday he was sent to West Stone it was a home for boys and girls between the age of nine and twelve.
When he arrived at his new home he was very pleased as he had been sent by the Doctor because he was very intelligent and very brainy.

At West Stone the boys and girls used to get up at (8 o'clock in the morning and at (9 o'clock they would go to the dinning room for there breakfast and after he would go to the toy room for his toys and then he would go to the playground with the boys and girls.

But to him it was just the same as Pewsey Hospital. Next morning the Doctor came to visit the boys and girls and he said to Charles how are you

Since typewriters became established as basic tools in the Remedial Centre the mean reading improvement of those using i.t.a. rose to 48 months.

The experiment has shown, therefore, that those soldiers who have used i.t.a. have not only made a significantly greater improvement in real reading ability than those of comparable disability using T.O. but that this improvement has been startling when related to the instructional time involved.
However, the human aspects of the experiment became its most important facet to us—the most significant effect being in the improvement in the general outlook of these students, in their self-confidence and in their increased self-respect. Their newly-found confidence in their own ability to achieve success had a marked effect upon their reaction not only to academic progress but also to each other. They became more co-operative and less anti-social and, in consequence, as is confirmed by the report of various unit commanders, they became better men and more proficient soldiers.

Some of this is dramatically evidenced in a selection of tape recordings which I propose to play for you at the end of this presentation. The confident and relaxed approach, the improvement in expression and phrasing and the removal of tensions are self-evident from these “before” and “after” recordings. Another interesting social factor is that there has been no instance of absence without leave or discharge by purchase by members of the experimental group.

An unexpected bonus in the experiment was that the i.t.a. pupil, although concentrating almost exclusively on reading and writing, had arithmetic improvements which were well up to the School mean.

This carry-over of ability is to be expected in problem arithmetic where reading attainment has a direct bearing upon the solution, but what is surprising and remarkable is that a comparable improvement should also be evident in mechanical arithmetic, concerned only with calculations.

The results of the five years’ experimentation may be summarised as follows:

1. i.t.a. offers a greater security in the initial learning task.
2. Backward adults learn to read more rapidly because i.t.a. reduces the initial burden of learning by offering fewer:
   (a) characters;
   (b) phonic symbols;
   (c) word patterns to be learned.
3. The rapid success rate enables the students to gain language experience which is vital to an appreciation of word patterns.
4. i.t.a. assists understanding of the structural relations between spoken and written symbols and thus, ultimately, spelling attainment in T.O.
5. There is no difficulty in the transition from i.t.a. to T.O.
6. i.t.a. facilitates and fosters independence in writing.
7. The rapid success rate induces more controlled emotional responses and gain in self-respect.
8. The students gain self-confidence and a new awareness and independence.
9. The striking increase in morale fosters motivation.
10. There is a surprising carry-over of ability and confidence to arithmetical attainment.

11. The men concerned have become more co-operative and less anti-social and, therefore, both better citizens and more proficient soldiers.

In conclusion, I would like to make two further points.

First, whilst we are certain that, for the type of soldier student I have described, i.t.a. is the most effective means of gaining the worthwhile end of literacy we do not regard it as a panacea for all problems of reading disability.

Secondly, I am concerned that you should all realise that i.t.a. will not succeed of itself—it still requires dedicated professional teachers using sound teaching methods.

E Letter from the Home Office, 29th December 1971. p. 6, footnote 9

HOME OFFICE
89 Eccleston Square London SW1
Telephone 01-828 9848

Your reference
Our reference PRG/66 22/197/1
Date 29 December 1971

H.M. BORSTAL, LOWDHAM GRANGE—USE OF THE INITIAL TEACHING ALPHABET

Some time ago you asked me if I could obtain from the teacher at Lowdham Grange Borstal who uses the Initial Teaching Alphabet an account of her work which you could have for your records.

These have now come to hand and I now send you a copy herewith. I am also attaching to it a covering statement from the education officer, Mr. Checkley.

The various interests concerned in the Prison Department have been consulted about these papers and I am to say that we are quite content to let you have them. If, however, you should ever wish to quote from
them we should be most grateful if you would acknowledge the source and make the point that the views expressed are those of the author and should not be taken as necessarily representing those of the Home Office, the Prison Department, or Government Departments generally. These are the usual restrictions we customarily place upon quotations of this kind and we very much hope that you will not find them too onerous.

With Kindest regards.

Yours sincerely,

A. S. Baxendale,
Chief Education Officer.

MEMORANDUM

From Tutor Organiser To The Governor Copies to
H. M. Borstal
LOWDHAM GRANGE
Tel.................Ext..................

Subject USE OF i.t.a.

Reference attached letter, I attach four copies of a paper by Mrs. Jones for despatch to Mr. Baxendale.

Further comments from me are only necessary to underline the opinion that the success of this system of learning to read is almost wholly due to the fact that it makes an approach not previously tried with any illiterate trainee we have yet had. Symbols are fairly easily learned, and once learned reading is possible and gives much of the necessary impetus for further progress. It gives success and a sense of achievement where there has been a long history of failure.

Some word on organisation is relevant. Teaching groups must be kept small and must meet daily in a regular routine for a full morning or afternoon session. There will, of course, be variations of topics, approaches and methods within this length of session, but this is also of great importance in establishing a close teacher/pupil relationship.

This is the prime factor of the success of this or any other method. Without the enthusiasm and confidence of the teacher in the method there could not be the same very gratifying results.

C. Checkley,
Tutor Organiser.
To i.t.a. or not to i.t.a.

Yes, that was the question!
The answer? Anything was worth trying if it could help my lads.
So to work.
Most trainees received in my class have a Reading Age of virtually nil. Most initial attempts at handwriting are pathetic.
Some are bordering on subnormality, and have attended Special or E.S.N. schools, or have drifted through Secondary Modern schools.
All are immature and insecure, with little or nothing in their favour. 90% are apathetic and initially hostile, and as a result of continuous failure hate 'books'.
First then, before anything, the approach—to let them know you are on their side. To coax, cajole, be gentle and understanding but still firm. To praise, praise and more praise, however small and slow the progress. To wipe away that sullen face and replace it with a smile. Sometimes this may take weeks, but success is essential before plying your goods—then, sell i.t.a.
The results are really worthwhile.
Material initially (I refer to my starting point in 1965) was poor—perhaps not for the infant and junior child, but for the young adolescent there was little to offer. Hence, a lot of material had to be 'home made'. Ironically, similar apparatus is now being marketed.
How much easier it is to learn one symbol (letter) e.g. wo for the 'oo' sound (as in zoo) than the thirty odd various alternatives as in T.O. An immediate burden is lifted from the trainee's shoulders. Again, it is something new. How can one be expected to suddenly produce a miracle when schools and teachers have failed over 10 or 11 years with T.O.
So i.t.a. is fresh and a challenge.
The delight and so obvious pleasure on finding he can quickly read and write in i.t.a. is fantastic, and most lads using this method seem to undergo a psychological change for the better.
Neither a phonic, nor a look-and-say process is used—perhaps rather a combination of the two; and perhaps it is best for the teacher to stick at what he or she is best adapted to.
To get down to the actual task of learning to read in i.t.a. how much less complex it is. The ambiguities of the English language T.O. are rapidly reduced.
Why k n i f e? Why not n i f ? Why cough—when we say cof? There are 44 symbols to learn each giving its own sound and never changing as in T.O. e.g. do; shoe; zoo; blue.
What of the transition? No real problems have emerged so far. It just seems “to happen” and as questions etc. arise we tackle them, explain, and sort out.

Time factors vary. A more mature, stable lad will perhaps grasp i.t.a. very quickly and can read quite fluently in i.t.a. by his third month, making the transition gradually in his fourth/fifth/sixth month.

Others take longer. But there appear to be few failures.

Of course a few written words will stick. But what matter? To be able to write at all is what counts. Who would not know on reading a word spelt “beccos”, that it means “because”.

In fact many trainees find they can read their parents’ letter much more easily after i.t.a. The similarity of their poor “pidgin English” spelling is remarkably similar.

To receive a trainee with this * beside his name, which means to us Reading Age nil, and roughly twelve months later to find a letter written to you from say Warrington, Lancs, in a lad’s own handwriting speaks in itself of the virtues of i.t.a.

I am addicted!

List of Books—Apparatus found most useful
The Griffin Readers (obtainable i.t.a. and T.O.)
The Inner Ring Series (obtainable i.t.a. and T.O.)
A Chance to Read. i.t.a. only
The Ladybird Series. i.t.a. and T.O.
(There are many single books also suitable which can be selected from the i.t.a. book list)
Picture and Sounds Cards i.t.a.
My First Word Book i.t.a.
Invicta Word Building Box i.t.a.
Picture Sentence Matching Cards i.t.a.
Word Building Letters i.t.a.
i.t.a. Alphabet Rubber Stamps
Wall strips can easily be home made.

Books found to be useful at the transition stage are a series actually aimed at immigrants, Ronald Ridout’s “International English” books 1-5.

F Hansard, 18th April, 1972: Written Answer to Question on Reading Ability. p. 10, footnote 17

Reading Ability

Mr. Tilney asked the Secretary of State for Education and Science if she will republish the figures for reading ability for 15-year-old boys and girls in the same form as that in Hansard of 3rd June, 1964, covering the
reading surveys of 1948, 1952, 1956 and 1961, but with the addition of the results for the most recent survey and with the small amendment to the figures of 1961 which were later recommended as preferable.

Mrs. Thatcher: The figures requested are as follows:

**ATTAINMENTS OF PUPILS AGED 15 IN THE WATTS VERNON READING TEST**

<table>
<thead>
<tr>
<th>Score Range</th>
<th>1948</th>
<th>1952</th>
<th>1956</th>
<th>1961 (see note)</th>
</tr>
</thead>
<tbody>
<tr>
<td>35-31</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td>30-23</td>
<td>27</td>
<td>22</td>
<td>23</td>
<td>34</td>
</tr>
<tr>
<td>22-18</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>17-9</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

**NOTE:** The survey for 1961 excluded grammar and direct grant schools. The figures given for this year have been calculated by incorporating in column A the results obtained in 1956 by pupils from these schools and in column B an estimate of their results, based on the assumption that the performance of all pupils improved at a comparable rate between 1956 and 1961. A fuller discussion of the reservations to be attached to the figures for 1961 and 1971 is contained in the report “The Trend of Reading Standards”.

G  "But will they ever learn to spell correctly?" by Dr. J. R. Block: "Educational Research", Vol. 14, No. 3, June 1972 (NFER). p. 23, para. L (a) (vii)

Because this publication will be readily available in all Libraries specializing in Education, readers are asked to refer to the article in Educational Research as above.

H  Table 19 (ii), p. 264 of "i.t.a.: An Independent Evaluation". p. 24, para. L (a) (viii)

C. SPREAD IN PUPILS’ PERFORMANCE

The amount of overlap between pupils in i.t.a. and T.O. groups is very considerable. If we look upon researches as a sort of greyhound race between a large number of i.t.a. and T.O. pupils and plot the position 50
of the percentage of runners on the course after a given period of time, e.g. in Downing (1967) (Table E1) after 2\(\frac{1}{2}\) years (Fig. 19 (ii)), we see at a glance that the i.t.a. group are superior on the whole to the T.O. group, but that the two groups nevertheless string themselves out over the whole field, a considerable number of T.O. children remaining superior to a considerable number of i.t.a. children.

**FIGURE 19(ii)**

Progress of i.t.a. and t.o. groups through the basic reading series after 2\(\frac{1}{2}\) years (derived from Table E1, Downing (1967))

(tested in the medium of instruction)

<table>
<thead>
<tr>
<th>Non-starters</th>
<th>i.t.a.</th>
<th>t.o.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book 1 or 2</td>
<td>//</td>
<td>*****</td>
</tr>
<tr>
<td>Book 3</td>
<td>/////</td>
<td>*****</td>
</tr>
<tr>
<td>Book 4</td>
<td>/////</td>
<td>*****</td>
</tr>
<tr>
<td>Book 5</td>
<td>/////</td>
<td>*****</td>
</tr>
<tr>
<td>Beyond Book 5</td>
<td>/////</td>
<td>*****</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In the Neale test roughly two-thirds of the i.t.a. group would be placed in the top half of the T.O. group, or looking at the matter another way, in a group of three superior (top half) pupils two of them would have been taught by i.t.a. and one by T.O. The differences between the effectiveness of the two media are thus strongly marked, but by no means overwhelming. Differences are much smaller according to the Standish N.S. 45 test. However, these figures include the drop in relative attainment following the transition to T.O. after only two years.

<table>
<thead>
<tr>
<th></th>
<th>Top quarter</th>
<th>Second quarter</th>
<th>Third quarter</th>
<th>Bottom quarter</th>
<th>Top half</th>
<th>Bottom half</th>
</tr>
</thead>
<tbody>
<tr>
<td>t.o. pupils</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>i.t.a. Neale test B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(accuracy after 3 years)</td>
<td>39%</td>
<td>25%</td>
<td>21%</td>
<td>15%</td>
<td>64%</td>
<td>36%</td>
</tr>
<tr>
<td>i.t.a. Neale test B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(speed after 3 years)</td>
<td>34%</td>
<td>30%</td>
<td>20%</td>
<td>16%</td>
<td>64%</td>
<td>36%</td>
</tr>
<tr>
<td>i.t.a. Neale test B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(comprehension after 3 yrs)</td>
<td>33%</td>
<td>33%</td>
<td>20%</td>
<td>14%</td>
<td>66%</td>
<td>34%</td>
</tr>
<tr>
<td>i.t.a. Standish N.S.45 test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(after 3 years)</td>
<td>21%</td>
<td>33%</td>
<td>28%</td>
<td>18%</td>
<td>54%</td>
<td>46%</td>
</tr>
</tbody>
</table>
Figure 6

Incidence of reading disability in i.t.a. group compared with T.O. group (i.e. proportion of pupils in lowest scoring category).

All differences significant beyond 0.1 per cent level.

χ²
31.30
25.00
14.30
16.70

N=459 in each group
N=585 each group

Score 0-4
Score 0
Score 0
Score 0

Schoell
Graded
Word Reading
Test (1½ years
in school)
Neale Analysis of Reading Ability

i.t.a. group
T.O. group

Per cent of group

0  10  20  30
REFERENCES

ANDRESKI, Professor Stanislav. “Social Sciences as Sorcery” (Deutsch, London, 1972)

BLOCK, Dr. J. R., “But will they ever learn to spell correctly?” from “Educational Research”, Vol. 14, No. 3, June 1972 (NFER)

DOWNING, Professor John A. “The i.t.a. Symposium: Research Report on the British Experiment with i.t.a.” (NFER, 1967)
“Materials and Instructions for beginning reading with i.t.a.” from Report of Second Annual International i.t.a. Conference, Lehigh University 1965 (i.t.a. Foundation)
“Reading Readiness Re-examined” from “First International Reading Symposium”, U.K.R.A. Conference, Oxford University, 1964
“i.t.a.’s Effectiveness in the Prevention and Treatment of Disabilities in Reading and Writing”, from Literacy Discussion, Vol. III, Nos. 3-4, September/December 1972 (International Institute for Adult Literacy Methods, Teheran)


Hansard, 18th April 1972. Columns 71/72. Written Answer to Question on Reading Ability.

Home Office Letter of 29th December 1971 from Mr. A. S. Baxendale, Chief Education Officer, and report from H.M. Borstal, Lowdham Grange, on their use of i.t.a.


MORRIS, Dr. Joyce. “Reading in the Primary School” (NFER, 1959). “Standards and Progress in Reading” (NFER, 1966)


Russell Committee on Adult Education. Written Evidence submitted by Mr. Cliff Edwards, Dr. John Gardner, and Sir James Pitman: 22nd February 1971

54
START, K. B., and WELLS, B. K. "The Trend of Reading Standards" (NFER 1972)


WARBURTON, Professor P. W., and SOUTHGATE, Vera. "i.t.a.: An Independent Evaluation: the report of a study carried out for the Schools Council" (Murray/Chambers, 1969)