Third year results (Grade 2) are reported for the Initial Teaching Alphabet (i.t.a.) study, selected as an experimental reading medium because its symbol-sound consistency makes learning to read a simpler task. Instruction was begun at the kindergarten level. The study investigated whether the i.t.a. program helps improve the reading skills of the inner city black students, and whether the inner city black students can learn to read in kindergarten using the i.t.a. program. At the end of grade 2, the i.t.a. students were found to have achieved significantly higher scores on all the reading subtests of the Stanford Achievement Test than students in Traditional Orthography classes. The study suggests that a combination of introducing reading in kindergarten and the use of i.t.a. in the beginning instruction is one possible answer to reversing the trend of inner city students' falling far behind grade level in reading skills. (LH)
An Interim Report on the Youngstown i.t.a. Study
Third Year Results (Grade 2)

Prepared by
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Educational Research Council of America

The idea of trying out i.t.a. with innercity black students was conceived by Robert L. Pegues, Jr. while he was Coordinator of Urban Education at ERC. He obtained the cooperation of administrators and teachers of Youngstown schools to start the Youngstown i.t.a. Study in 1969-70.

Implementation of the study required team effort of various ERC departments in all phases. Mr. Pegues, in 1969-70, and later Mr. Ralph Armour, in 1970-72, of the Urban Education Department served as the liaison between ERC and the Youngstown schools. The i.t.a. staff was mainly responsible for the administration of the Stanford tests and collection of data. The Evaluation and Testing staff was mainly responsible for the research design, analysis of data and preparation of reports.

This study could not have been possible without the support of the school administrators and teachers of Youngstown.

July, 1972
An Interim Report on the Youngstown i.t.a. Study
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It is a well recognized fact that the existing educational system has largely failed to meet the needs of the students of low socio-economic status and minority groups. Students in these categories lag behind in their school learning. The situation intensifies as they move through the upper grades. It has been reported that by grade 6, average innercity students have fallen behind approximately three grades in mathematics and reading (Clark, 1970).

This appalling indictment of elementary education for innercity students is the impetus for a study to search for a more effective reading program for the beginning innercity readers.

The i.t.a. (Initial Teaching Alphabet) was selected as the experimental reading medium in the study because the symbol-sound consistency of i.t.a. makes learning to read a simpler task. Instruction was begun in kindergarten because of the finding of a previous study (Ho, Eisler, Stroh, 1970) that the reading achievement of the students who began with i.t.a. in kindergarten was superior to the reading achievement of those students who began with either i.t.a. or T.O. (Traditional Orthography) in the first grade.

With the cooperation of the Youngstown, Ohio school system, the Evaluation and Testing Department of ERC launched the study in the school year 1969-70 in joint effort with the ERC Urban Education and Reading Departments. The study investigated two major questions:

(1) Does the ERC i.t.a. program help improve the reading skills of the innercity kindergarten students?

(2) Can the innercity black students learn to read in kindergarten using the ERC i.t.a. program?
In the fall of 1969, four Youngstown kindergarten classes were introduced to the ERC i.t.a. program. Four other classes, instructed with the T.O. program that was being used in the Youngstown schools, served as the control group. At the end of the kindergarten year, the i.t.a. group performed significantly better than the T.O. group on tests measuring comprehension of single words and short sentences and on the letter-sound association skills (Ho, Menz, Eiszler, 1972). The study indicates that it is feasible to teach i.t.a. reading skills to innercity black students in kindergarten.

In grade 1, the i.t.a. students continued their superiority over the T.O. students. Average grade equivalent scores on all reading subtests of the Stanford Achievement Test were significantly higher for students in the i.t.a. classes. These i.t.a. students also surpassed their T.O. counterparts in other aspects. In comparison with the T.O. students, they were better spellers and were able to spell words of a wider range of difficulty; they could pronounce more words and seemed to have greater comprehension of what they read orally; they seemed to read more library books; they wrote more fluently and used a richer vocabulary; and they produced greater and more varied output in their oral language (Ho, Menz, Eiszler, 1972).

The present report is concerned with the second grade results. While most of the 52 i.t.a. students and 52 T.O. students who were in the first grade study entered grade 2 in September, 1971, some were either retained in grade 1 or transferred to the EMR (educable mentally retarded) classes. Four i.t.a. students as compared to nine T.O. students were retained in grade 1. One i.t.a. student as contrasted to four T.O. students was transferred to the EMR classes. For those students who entered grade 2, the four i.t.a. classes were kept intact, but the T.O. students were distributed throughout seven classes. The i.t.a. classes used the ERC i.t.a. Transition Program; the T.O. classes used the Scott, Foresman reading series.

Five reading subtests of the Stanford Achievement Test, Primary II, Form W, were administered to both the i.t.a. and the T.O. groups in May, 1972. These included: Word Meaning, Paragraph Meaning, Spelling, Word Study Skills, and Language. All i.t.a. and T.O. students were tested in T.O. Mental ability was measured by the Kuhlman-Anderson Test which was given to all second graders in Youngstown schools in October, 1971.

The trend remained favorable to the i.t.a. students in grade 2. At the end of grade 2, the i.t.a. students again achieved significantly higher scores on all the reading subtests. (See Table 1.) In addition, the i.t.a. group consistently had a higher percentage of students at or above the grade placement on each of the five reading subtests than the T.O. group. Statistically, significant differences were found on Word Meaning, Paragraph Meaning, and
Word Study Skills between the total i.t.a. and T.O. groups. Similar significant differences were also found between students with IQ's equal to or above 100 in the two groups. (See Table 2.) It is worth noting that approximately 50% of all the i.t.a. students were at or above grade placement on all tests, while the percentages of the T.O. students ranged from 18% to 29% on four tests. Only on Spelling were 50% of all the T.O. students at or above the grade placement.

The grade 2 results demonstrated that the transition from i.t.a. to T.O. did not pose a handicap to the innercity black students in reading achievement. Nor did the black dialect interfere with their learning of the "Standard English" when i.t.a. was used in beginning reading.

The Youngstown study suggests that a combination of introducing reading in kindergarten and the use of i.t.a. in the beginning instruction is one possible answer to reversing the current trend of innercity students' falling far behind grade level in reading skills.

WCH:gh
7/7/72
Table 1: Results of the t-tests between the mean scores of the i.t.a. and T.O. groups on the Stanford reading subtests, Primary II, Form W

(Grade Placement = 2.8)

<table>
<thead>
<tr>
<th>Mean Score</th>
<th>i.t.a. (N = 52)*</th>
<th>T.O. (N = 38)*</th>
<th>Difference</th>
<th>t-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kuhlman-Anderson IQ</td>
<td>99.21</td>
<td>96.11</td>
<td>3.10</td>
<td>N.S.</td>
</tr>
<tr>
<td>Word Meaning</td>
<td>2.8**</td>
<td>2.5</td>
<td>.3</td>
<td>S.</td>
</tr>
<tr>
<td>Paragraph Meaning</td>
<td>2.5</td>
<td>2.1</td>
<td>.4</td>
<td>S.</td>
</tr>
<tr>
<td>Spelling</td>
<td>3.2</td>
<td>2.6</td>
<td>.6</td>
<td>S.</td>
</tr>
<tr>
<td>Word Study Skills</td>
<td>2.8</td>
<td>2.3</td>
<td>.5</td>
<td>S.</td>
</tr>
<tr>
<td>Language</td>
<td>2.7</td>
<td>2.5</td>
<td>.2</td>
<td>S.</td>
</tr>
</tbody>
</table>

*The preliminary second grade analysis included 52 i.t.a. students and 38 T.O. students. The i.t.a. group consisted of 43 students who were in the grade 1 study and 9 students who did not have complete data either in kindergarten or in grade 1. The T.O. group was composed of 32 students who were in the grade 1 study and 6 students who did not have complete data either in kindergarten or in grade 1.

**The mean score on the reading subtest represents average grade equivalent score.

N.S. refers to "not significant."
S. refers to "significant."
Table 2: Results of $\chi^2$ tests of the differences between percentages of i.t.a. and T.O. students at or above grade placement

<table>
<thead>
<tr>
<th>Test</th>
<th>Students with IQ less than 100</th>
<th>Students with IQ equal to or above 100</th>
<th>Total group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word Meaning</td>
<td>39%</td>
<td>30%</td>
<td>9%</td>
</tr>
<tr>
<td>Paragraph Meaning</td>
<td>36%</td>
<td>15%</td>
<td>21%</td>
</tr>
<tr>
<td>Spelling</td>
<td>55%</td>
<td>52%</td>
<td>3%</td>
</tr>
<tr>
<td>Word Study Skills</td>
<td>36%</td>
<td>30%</td>
<td>6%</td>
</tr>
<tr>
<td>Language</td>
<td>27%</td>
<td>22%</td>
<td>5%</td>
</tr>
</tbody>
</table>

N.S. refers to "not significant."

S. refers to "significant."
REFERENCES


Ho, Wai-Ching; Menz, Fredrick E.; Elszler, Charles F.  *Effects of teaching i.t.a. to inner-city black children in kindergarten and first grade.* A paper presented at the annual meeting of the American Educational Research Association in Chicago in April, 1972.