A study determined the effectiveness of the "Direct Instruction" program on the reading achievement of sixth-grade students. "Direct Instruction," known as "Distar" in the 1960s, is a phonic-based method that uses scripted lesson plans engaging students to learn by memory and classroom responses. Subjects were 30 sixth-grade students randomly selected from a pool of 72 students who attended Arna W. Bontemps Public School located in the predominantly low socioeconomic neighborhood in Chicago, Illinois' Greater Englewood area. Subjects' scores on the reading portion of the Iowa Tests of Basic Skills were compared. Results indicated that students taught using Direct Instruction as opposed to students taught in the regular classroom had no statistically significant difference on reading scores. Findings of an earlier study suggest that students have to be taught Direct Instruction for 2 years before a significant difference appears. (Contains 13 references and 1 table of data.)
The effectiveness of *Direct Instruction* on reading achievement.

**Allen M. Mosley**

*Direct Instruction* is a very well planned and extremely effective method of instructions. It is fully capable of erasing America's basic skills crisis reading, writing and mathematics, according to Englemann and Carnine (1982). Based on systematic methods and extensive research, *Direct Instruction* is perhaps the most fully validated teaching tool ever implemented in schools. At this point, very few educators or policy-makers are aware of the method or the effectiveness. Those, however, who do know about the method may never go back to or change from this method.

*Direct Instruction* has been around since the mid-1960's. At that time the program was known as *Distar*. The program was used primarily for primary grades to increase their reading and math scores. The score to be increased will assure that the student will continue to read or do math at grade level according to the research of Engleman (1970).

There are those who believe that direct instruction is a basic skill needed for improving the reading scores of students at the elementary and secondary level of education according to Lindsley (1984).

Although educators, school policy makers, business leaders, and the general public have become increasingly concerned about the three basics, reading, writing, and arithmetic in American schools, research-based solutions have existed for over two decades in the form of some type of measurably superior teaching methodologies, teaching and *direct instruction*.
Direct Instruction differs from other behavioral education approaches in degree of emphasis on the antecedent stimuli, the precise nature of teacher wording, examples, how teachers present new materials to students. Englemann and Carnine (1982) see instruction in the same light as the problems of experimental control environmental variables must be controlled leaving only one variable, the learner. Environmental variables are controlled through "faultless communication." (Englemann & Carnine, 1982); instructional materials and teachers' delivery must be clear and unambiguous for faultless communication to take place.

Direct Instruction is defined as a phonic-based method that uses a scripted lesson plans engaging students to learn by memory and classroom responses. Since the comeback of Direct Instruction formally known as Distar, student scores have increased dramatically.

There is much controversy over the Direct Instruction. There are many who believe that the Direct Instruction is very successful, such as Bereiter and Englemann (1966). They believe that the program is the reason for so much success in some schools. Secondly, Direct Instruction is taught in a way in which a student is guaranteed success. For example, they, the student, learn through rate, they repeat responses to the teacher. The student is engaged in about ninety minutes of verbal and written responses. Finally, Direct Instruction use a method in which students must participate fully and as a result, they remember more. Many educators, parents and significant others believe that this is why this method Direct Instruction is so successful.

However, there are some, such as Janet Spector (1995), & Kenneth Morgan (1995) that indicate in one way or another that feel that Direct Instruction is no better than any other method of teaching. Many of the educators feel that the program is a waste of time and students will be bored with it after a while. They feel that Direct Instruction is geared for primary grades, and students in the intermediate and upper grades should have mastered the method then. Many of the
teachers who have been teaching for a while are not in favor of Direct Instruction because they are set in a style of teaching, and it’s very difficult for them to change.

While there is much controversy over Direct Instruction, failure to learn to read, write or do math will have a great impact on the future society. Impacts such as an illiterate society, high unemployment, a poor educational system in America, etc. Therefore, many researchers, as Gersten (1982), believe that one should teach the best way possible using whatever method possible to make sure the society of tomorrow is able to read, write, and do math.

Although Direct Instruction is fairly new, there has been much research on the topic. The research on the topic by researchers, such as Englemann, Watkins, Lindsley, and others did much research to find out the effectiveness of direct instruction. This research tested and related programs to see which one would be the most effective for reading and math achievement.

According to Engelman (1970) Direct Instruction has a great effect on the reading and math achievement of school age children. He also stated that students being taught using Direct Instruction tend to do better than those taught using other methods.

Due to the need of more students being able to read, write and do mathematics, Bereiter and Englemann (1970) and associates were given federal funds to participate in Project Follow Through which was a program to identify effective teaching programs for students who are at risk for failure. The approach to instruction developed by Bereiter-Englemann combined with principles of Direct Instruction proceed to be successful, and most effective in a study done by Bereiter and Englemann in 1966.

Perhaps the most compelling evidence for the effectiveness of Direct Instruction comes from critiques from House, Glass, McLean & Walker (1978), it was generally acknowledged that the Direct Instruction model was clearly the most effective of all programs on measures of basic skills
achievement. House, Glass, McLean & Walker (1978) tested children after being instructed using direct instruction and found the scores to be somewhat higher than those taught in regular programs.

Some researchers have tried to assess the stability of the effects of the Direct Instruction model with scores from achievement test such as IOWA, CAT, etc. For example, Becher and Gersten (1982) compared the scores of fifth and sixth grade students who had participated in Direct Instruction. Scores were significantly higher on measures of reading and math according to the research of Becher and Gersten (1982).

According to Watkins (1988) the procedures for teaching Direct Instruction features certain practices which are distinguished from more traditional approaches. Some of the features are described as follow, scripted presentation, small groups, unison responding, signals, pacing, correction procedures and oral reading. These features are virtually guaranteeing success among students, according to the research of Watkins (1988).

The schools that are not using Direct Instruction were compared to Johnson (1989) and it was found that the schools using Direct Instruction usually had higher achievement scores.

Literature on the effectiveness of Direct Instruction is coming of age. Many researchers indicate in one way or another that Direct Instruction is one of the most if not the most effective method of teaching. This method has been proven by researcher to be the most effective way to increase achievement scores among students.

In contrast, some researchers disagree with the Direct Instruction method. They feel that students will learn anything in a given amount of time regardless as to the type of program used. According to Johnson (1989), Direct Instruction is the best known method of increasing reading and/or math scores.
Based on research by Spector (1995), she feels that direct instruction isn’t as effective as many research say. She argues that learning how to read in alphabetic system requires children to understand the complex relationship between print and speech. She also suggests that pre-reading and beginning reading instruction should be designed to facilitate the acquisition of phonemic awareness. She also recommends specific practices for reading instructions will increase a student’s reading score.

Therefore, the purpose of the study is to determine the effect of the *Direct Instruction* program on the reading achievement of sixth grade students.
Procedures

Population
The population for this study will include 72 sixth grade students. The students attend Arna W. Bontemps Public School, which is located in a predominantly low socioeconomic neighborhood in Chicago’s Greater Englewood area. The population is comprised of 100% minority students.

Sample
From the 72 sixth grade students, the school record showed that 30 received the Direct Instruction reading program while 42 did not receive the program. Thirty students were randomly selected from each of these sub-populations.

Each spring the Iowa Tests of Basic Skills (ITBS) are administered to each student in Chicago’s Public Elementary Schools. Two samples were identified from the school records of those students who had received the Direct Instruction reading program and those students who had not received the program. The reading results of the ITBS administered during the spring of 1996 school year will be used in this study. The post-test control group design will be employed.

The instrument used for this study will be the IOWA Test of Basic Skills, 1996 edition; Level 12 Form A. The test was administered to the groups comprising each class and was timed, lasting 40 minutes in two segments. The test measured achievement in the area of reading comprehension, and vocabulary.
**Treatment of Data:**

The findings will be tabulated in terms of means and standard deviations. The *t* test will be employed at the .05 level of confidence to determine if there is any statistically significant difference between the mean scores.

The samples for the study included sixth grade students of Arna W. Bontemps School. Each spring students take the Iowa Test of Basic Skills (ITBS). From these sixth grade students, two groups were randomly selected. Students in one group were taught using the Direct Instruction program while students in the other group were taught using the regular reading program. Results from the 1996 ITBS reading test were used as the post-test.

The findings of this study have been proven through the method of data collection and analysis of the data that students taught using direct instruction as opposed to students taught in the regular classroom had no significant difference on the reading scores of sixth grade students.

The findings were based on analysis of the data as mentioned before. The findings were also based on level of the two groups and the size of the two groups selected randomly students.

In conclusion, in order for the direct instruction program to make a significant difference on achievement scores, whether they are reading or math scores, the student would have to be taught in the program for at least two years according to Englemann.
A t test (p<.05) for the sample was done on the test scores to determine if there was a statistically significant change in reading achievement after being taught using the Direct Instruction program.

Table 1 summarizes the statistical analysis.

**Table 1**

Means, Standard Deviations, and t Tests for the Experimental Group and Control Group for Reading Achievement Scores.

<table>
<thead>
<tr>
<th>Test</th>
<th>Direct Instruction</th>
<th>Regular Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=30</td>
<td>N=42</td>
<td>t = 2.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Calt = 1.03</td>
</tr>
<tr>
<td>Post-Test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>SD</td>
<td>1.06</td>
<td>0.64</td>
</tr>
</tbody>
</table>

* Sig > calt at .05 level
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