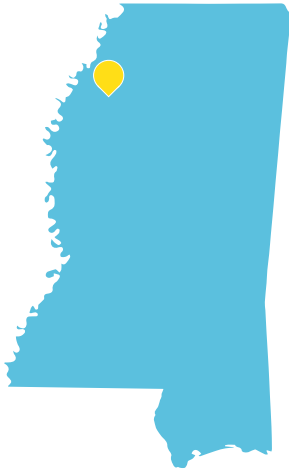


# CaseSTUDY

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## Clarksdale Municipal School District: How to Make Sense of Mixed Results?



In 2013, Clarksdale Municipal School District received a \$10 million Race to the Top District (RTT-D) grant to improve learning through innovation and personalization. As part of this grant, the district expanded its use of technology, launching a one-to-one computing initiative that provided devices to all students in all of its schools. Since purchasing the new devices, the district has introduced a variety of technology-based resources and applications for teachers to use with students. Clarksdale also hired technology coaches to maximize the effective use of technology in all classrooms.

Clarksdale administrators and staff received positive feedback from teachers and students on many of the new applications, but the district lacked evidence of the technologies' effectiveness beyond these anecdotal accounts. Wanting to better understand whether specific applications improved student outcomes, district officials used data routinely collected, to produce more concrete evidence. They also needed to determine whether the technologies piloted with RTT-D grant funds merited long-term investment.

### Clarksdale Municipal School District

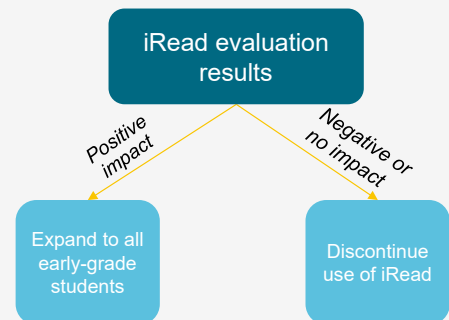
**Location:**  
Northwestern Mississippi

**Number of students:**  
3,200

**Student population:**  
98% black  
96% economically disadvantaged

### THE INITIATIVE

Sarah Hawley, a data coach in the district, led Clarksdale's efforts to pilot test a new reading application called iRead. The teachers' and administrators' long-term goal was to reduce the percentage of students who fail kindergarten and increase the percentage of students who read at grade level by the end of 2nd grade. They hoped that iRead would help improve early-grade reading. The goal of the evaluation was to use evidence to inform their decision on whether to expand iRead to all early-grade students or to discontinue its use. With support from the online Ed Tech Rapid Cycle Evaluation Coach



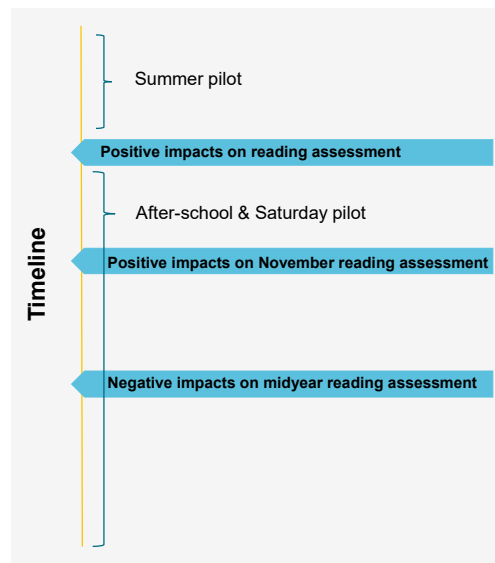
How could they make sense of these contradictory results? What recommendation should they make to the district about the future implementation of iRead? As RTT-D Director Rashunda Young mused, “Is iRead a program that principals should invest in post-RTT funding?”

and Mathematica Policy Research, Hawley and her team conducted several rapid cycle evaluations to see whether iRead improved students’ reading scores.

Students assigned to the iRead program received individualized reading instruction on a tablet and participated in a teacher-led small-group phonics lessons. Ideally, students used the reading application for 15 minutes three times each week and received the in-person instruction for 10 minutes once a week.

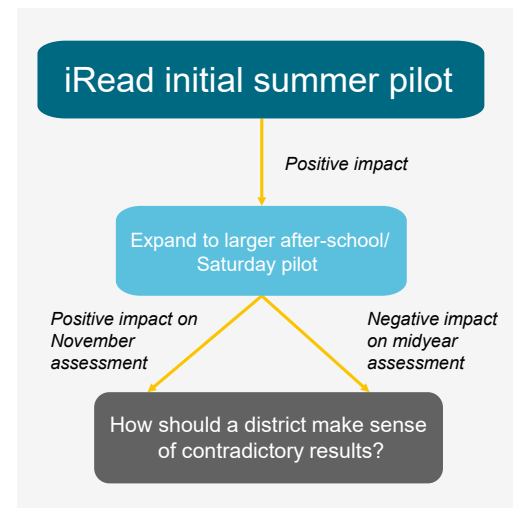
## THE DETAILS

In summer 2016, iRead was piloted during a summer reading program. Three classes were randomly assigned to either use the iRead program or to use only the existing reading software. Forty-six 1st-, 2nd-, and 3rd-grade students in the summer reading program were then randomly assigned to the one class selected to pilot iRead or to one of the two classes selected to continue using the existing program.



Initial results were promising. iRead students improved more on the Star Reading® assessment than students in the comparison groups. There was a 67 percent probability that iRead, as implemented during the summer program, had a positive effect. However, the initial results were based on a very small group of students and classes, and because only one teacher implemented iRead, it was impossible to disentangle iRead’s impact from the effects of that teacher’s instruction.

Despite the caveats, district officials were excited about these positive findings and decided to conduct a larger evaluation of the program during the school year. iRead was offered as part of an after-school and Saturday program to students in grades 2 through 4 who scored below the proficiency threshold in reading. Seven teachers in four elementary schools participated, and within each school, teachers were randomly assigned to use iRead or not. Next, the students in the three schools with more than one class were randomly assigned to a teacher.



After the program began in October, early evaluation results looked encouraging. Based on the November Star Reading® assessments, the estimated impact of iRead was 10.6 scaled points, and there was a 78 percent probability that iRead improved Star Reading® scores. The estimated effect was about one-tenth of the expected yearly improvement of an average student, and Clarksdale officials were excited to see an increase of this size in such a short time. Hawley and her team were feeling more confident about recommending the expansion of the program throughout the early grades.

But by January, Hawley’s positive outlook on iRead began to change. Evaluation results from the midyear Star Reading® assessment of the same students indicated that iRead decreased reading achievement by 12.1 points, on average, and that there was only a 22 percent probability that iRead had a positive effect.

Hawley and her team were disappointed after the positive findings from the first two cycles of the evaluation.

Hawley and Young and their district colleagues concluded that they had imperfect but sufficient evidence to expand the use of the low-cost iRead software to early-grade students throughout the district.

## THE WAY FORWARD

### Pay attention to implementation

Hawley and Young concluded that they must pay attention to how the iRead program is implemented. iRead's implementation was closely monitored during the summer program, but district staff had limited information about its implementation during the after-school and Saturday program.

#### Tips for understanding contradictory results

Check usage data and observations to assess implementation

Think about benefits in terms of cost of using the technology

Conduct additional tests to generate more evidence

iRead usage data suggest that some students were not using the application as recommended. In the summer program, the students used iRead about four times each week, but in the after-school and Saturday program, students used it only once or twice each week. During the school year, about 37 percent of students did not use iRead at all, perhaps because they stopped attending the program. A closer look at the usage data over time might help explain the difference in results from November to January.

Conduct your own rapid cycle evaluation at [edtechrc.org](http://edtechrc.org).

District officials also plan to explore whether the teachers provided instruction that complements the iRead app. If iRead is replacing teacher instruction rather than enhancing it, students in the iRead group may learn less than students in the comparison group. Hawley and Young will follow up with literacy coaches who observe the classes to find out what is happening in each of the seven classrooms.

### Examine the benefits and costs

Hawley and Young are cautious as they debate how to present results to principals. If they show the positive results, the principals may want to adopt the program immediately to help students prepare for the upcoming standardized tests. However, Hawley and Young do not want principals to think about iRead as a test-preparation program. In contrast, if they show the negative results, the principals may not want to use the program at all.

Until now, the RTT-D grant has paid for the iRead program, but the district must decide which technologies it will continue to fund after the grant ends. Because the cost of iRead is “nominal,” according to Young, and the evaluation showed some promising results, the district will probably renew the iRead license.

### Conduct additional rapid cycle evaluations

Overall, Young concluded, “This study has opened our eyes to things that we need to be cognizant of.” Clarksdale will continue to study the iRead program and monitor its implementation and results. Hawley and Young are eager to see the results from the end-of-year assessment of the students in the seven after-school and Saturday classes.

## AFTERMATH

Clarksdale decided to offer iRead in all K–2 classrooms in the district beginning in the 2017–2018 school year. After following up with literacy coaches and examining the usage data, Hawley and Young discovered that teachers in the comparison group heard about the positive effects of iRead and started using it with their students. Use of iRead in both the intervention and comparison groups did not explain the negative results observed in January.

