

What Works Clearinghouse



August 2010

WWC Quick Review of the Report “Financial Incentives and Student Achievement: Evidence From Randomized Trials”¹

What is this study about?

This study examined the effect of financial incentives on student achievement.

The study analyzed data on approximately 38,000 students from about 260 public schools in Chicago, Dallas, New York City, and Washington, DC.

In each city, about half of the schools were randomly assigned to begin a student incentive program; the other half were assigned not to offer incentives.

Researchers measured the incentives’ effect by comparing students’ achievement levels in schools with and without the program.

Student achievement was measured using standardized reading and math tests administered by each school district as part of its regular accountability program.²

How Were Financial Incentives Awarded?

Chicago: Ninth-graders received \$50 for each A, \$35 for each B, and \$20 for each C they received in five core courses at the end of each five-week grading period. Half of the rewards were given immediately after the grading periods ended, and the other half were held in an account to be distributed upon high school graduation.

Dallas: Second-graders were paid \$2 for every book they chose to read on their own, for up to 20 books per semester. Students had to pass a quiz about each book to verify they had read it.

New York City: Fourth-graders earned up to \$250 per year, and 7th-graders up to \$500 per year, for their performance on 10 school exams.

Washington, DC: Middle school students earned up to \$10 per day for attending school, exhibiting good behavior, and other measures that varied by school, such as wearing a uniform or completing homework.

Researchers considered the programs in Chicago and New York City “output” experiments, because their incentives were tied directly to educational outputs such as grades and test scores. The programs in Dallas and Washington, DC were considered “input” experiments, because their program incentives encouraged behaviors expected to improve grades and test scores.

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¹ Fryer, R. G. (2010). *Financial incentives and student achievement: Evidence from randomized trials* (NBER Working Paper 15898). Cambridge, MA: National Bureau of Economic Research.

² The study also examined other outcomes, such as student behaviors, daily attendance, report card grades, and effort. These outcomes fall outside the scope of the quick review protocol, and effectiveness of incentives on these outcomes is not evaluated in this quick review.

Quick reviews assess whether a study’s design is consistent with WWC evidence standards. They are based on the evidence published in the report cited and rely on effect sizes and significance levels as reported by study authors. The WWC rating refers only to the results summarized above and not necessarily to all results presented in the study. The WWC does not confirm study authors’ findings or contact authors for additional information about the study.

What did the study author report?

The study found no statistically significant effects on standardized math or reading outcomes in Chicago, New York City, or Washington, DC.

Out of six standardized reading achievement outcomes measured in Dallas, the study found two statistically significant effects. Among English speakers, students in the incentive schools scored approximately 0.18 standard deviations higher on English reading comprehension than students who were not eligible for incentives; the WWC interprets this as roughly equivalent to the difference between the 50th and 57th percentile of reading comprehension.

Among Spanish speakers, students in the Dallas incentive schools scored approximately 0.17 standard deviations lower in English reading vocabulary than students who were not eligible for incentives.

WWC Rating

The research described in this report is consistent with WWC evidence standards

Strengths: This was a well-implemented randomized controlled trial.

Cautions: Although no schools were dropped from the analysis, it is unclear how many students left the schools over the course of the study. If attrition was high, any observed differences between the groups may have resulted from the types of students remaining in each group.