## What Works Clearinghouse™



August 2014

## WWC Review of the Report "The Short-Term Effects of the Kalamazoo Promise Scholarship on Student Outcomes" 1,2

The findings from this review do not reflect the full body of research evidence on the *Kalamazoo Promise Scholarship* program.

#### What is this study about?

The study examined the impacts of the *Kalamazoo Promise Scholarship* program on academic and behavioral outcomes of students in grades 9–12 in Kalamazoo Public Schools (KPS). The program provides KPS students with scholarships to attend any community college or public university in Michigan. Scholarships are promised to those meeting residency requirements, so it is possible for students to know they will be eligible many years in advance and they may adjust their behavior accordingly.

Study authors compared the academic and behavioral outcomes in high school before and after the *Promise Scholarship* program was introduced. The intervention group included students who were eligible to receive the scholarship, and the comparison group included students who could not receive the scholarship (because they had not attended a district school for long enough to qualify). The analysis was based on approximately 14,500 student-year observations from the 2003–04 to 2007–08 school years.

Student outcomes that were included in the study were: student grade point averages, whether students earned course credits, the number of course credits earned, incidence of and number of days spent in suspension, and incidence of and number of days spent in in-school detention.

#### What did the study find?

None of the analyses presented in this study meet WWC group design standards, and therefore, the study findings are not presented in this WWC report.

### Features of the *Kalamazoo Promise*Scholarship Program

The *Kalamazoo Promise Scholarship* program offers college scholarships to graduating high school students in the KPS district.

The scholarship covers up to 100% of tuition and fees for attending any community college or public university in the state of Michigan for up to 4 years. The actual percentage of tuition and fees covered varies depending on how long the student attended school in the district. Students attending since kindergarten receive the full 100%. Students attending since ninth grade receive a scholarship covering 65%. Students who enter KPS in tenth grade or later are not eligible to receive the scholarship.

Other than the KPS school enrollment requirements, and the requirement that a student is admitted to and attends a community college or public university in Michigan, there are no GPA or financial need requirements to qualify. Thus, it is possible for students to know their eligibility for the scholarship for many years.

#### **WWC Rating**

# The research described in this report does not meet WWC group design standards

This study uses a quasi-experimental design in which baseline equivalence of the groups cannot be demonstrated.<sup>3</sup>

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#### **Endnotes**

- <sup>1</sup> Bartik, T. J., & Lachowska, M. (2013). The short-term effects of the Kalamazoo Promise Scholarship on student outcomes. In S. W. Polachek & K. Tatsiramos (Eds.), *New analysis of worker well-being research in labor economics* (Vol. 38, pp. 37–76). Bingley, United Kingdom: Emerald Group Publishing Limited.
- <sup>2</sup> Single study reviews examine evidence published in a study (supplemented, if necessary, by information obtained directly from the author[s]) to assess whether the study design meets WWC design standards. The review reports the WWC's assessment of whether the study meets WWC design standards and summarizes the study findings following WWC conventions for reporting evidence on effectiveness. This study was reviewed using the single study review protocol, version 2.0. A quick review of this study was released on May 14, 2014, and this report is the follow-up review that replaces that initial assessment.
- <sup>3</sup> To assess baseline equivalence of the students in the sample, the WWC requires information on baseline demographics and achievement separately for the intervention and comparison groups. However, this study uses district data from Kalamazoo that includes students who moved into the district after the intervention was implemented. The data for these students influence the impact estimates, but baseline characteristics are not available since they were not in the sample until they moved into the district. As a result, there are some students included in the analytic sample for whom it is not possible to demonstrate equivalence prior to the intervention. Therefore, baseline equivalence for this design cannot be demonstrated.

#### **Recommended Citation**

U.S. Department of Education, Institute of Education Sciences, What Works Clearinghouse. (2014, August). WWC review of the report: The short-term effects of the Kalamazoo Promise Scholarship on student outcomes. Retrieved from http://whatworks.ed.gov

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#### **Glossary of Terms**

**Attrition** Attrition occurs when an outcome variable is not available for all participants initially assigned to the intervention and comparison groups. The WWC considers the total attrition rate and

the difference in attrition rates across groups within a study.

**Clustering adjustment** If intervention assignment is made at a cluster level and the analysis is conducted at the student level, the WWC will adjust the statistical significance to account for this mismatch, if necessary.

Confounding factor A confounding factor is a component of a study that is completely aligned with one of the

study conditions, making it impossible to separate how much of the observed effect was

due to the intervention and how much was due to the factor.

**Design** The design of a study is the method by which intervention and comparison groups were assigned.

**Domain** A domain is a group of closely related outcomes.

Effect size The effect size is a measure of the magnitude of an effect. The WWC uses a standardized

measure to facilitate comparisons across studies and outcomes.

**Eligibility** A study is eligible for review if it falls within the scope of the review protocol and uses either

an experimental or matched comparison group design.

**Equivalence** A demonstration that the analysis sample groups are similar on observed characteristics

defined in the review area protocol.

**Improvement index** Along a percentile distribution of students, the improvement index represents the gain

or loss of the average student due to the intervention. As the average student starts at the 50th percentile, the measure ranges from –50 to +50.

Multiple comparison When a study includes multiple outcomes or comparison groups, the WWC will adjust

adjustment the statistical significance to account for the multiple comparisons, if necessary.

**Quasi-experimental** A quasi-experimental design (QED) is a research design in which subjects are assigned **design (QED)** to intervention and comparison groups through a process that is not random.

Randomized controlled A randomized controlled trial (RCT) is an experiment in which investigators randomly assign

trial (RCT) eligible participants into intervention and comparison groups.

Single-case design A research approach in which an outcome variable is measured repeatedly within and

(SCD) across different conditions that are defined by the presence or absence of an intervention.

**Standard deviation** The standard deviation of a measure shows how much variation exists across observations

in the sample. A low standard deviation indicates that the observations in the sample tend to be very close to the mean; a high standard deviation indicates that the observations in

the sample are spread out over a large range of values.

**Statistical significance** Statistical significance is the probability that the difference between groups is a result of

chance rather than a real difference between the groups. The WWC labels a finding statistically significant if the likelihood that the difference is due to chance is less than 5% (p < .05).

**Substantively important** A substantively important finding is one that has an effect size of .25 or greater, regardless

of statistical significance.

Please see the WWC Procedures and Standards Handbook (version 3.0) for additional details.

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