The report examined school climate and culture, student engagement, student academic performance, and ST Math student performance starting in the 2015-16 school year and evaluated during and up through the 2019-20 school year.
THE MORE ST MATH THAT STUDENTS COMPLETED, THE MORE LIKELY THEY WERE TO BE ON TARGET ON STAR MATH ASSESSMENTS.

INTRODUCTION:
The Wisconsin Evaluation Collaborative (WEC), housed within the Wisconsin Center for Education Research (WCER) at the University of Wisconsin-Madison, submitted a Year 5 External Evaluation report for the Milwaukee Partnership Schools initiative, addressing progress toward key goals of the initiative during and up through the 2019-20 school year. The Partnership initiative represents a collaborative effort among Milwaukee Public Schools (MPS), City Year, the Boys & Girls Clubs of Greater Milwaukee (BGCGM), UW-Milwaukee, and external funders to provide a coordinated set of supports designed to improve outcomes for students at four MPS schools. Nearly all students at the four K-8 schools involved qualify for free and reduced lunch. Two school sites are comprised mostly of African American students while the other two school sites enroll primarily Latinx populations.

The report informed three key questions regarding the Partnership initiative.

- **“Fidelity of Implementation/Program Participation:** What are the key components of the Partnership initiative (including the different types of programming, staffing, and other supports provided through the grant), how have they changed over the course of the initiative, and at what level of fidelity (including student participation levels) were they implemented during the 2019-20 school year?”

- **“Stakeholder Perceptions:** How do key stakeholders (from both MPS and partner organizations) involved in the Partnership initiative perceive progress during Year 5, including successes, challenges, and suggestions for improvement? To what extent do key stakeholders believe that effective coordination and communication is occurring, both within and across school sites and partner organizations? To what extent are Partnership organizations and individual program components devoting attention to the issue of sustainability?”

- **“Outcomes:** To what extent are changes in key outcomes being observed at Partnership sites, including (but not limited to) improvement in school climate, student engagement, and academic performance? Are students receiving services under individual components of the initiative showing increased performance on relevant outcomes compared to those not receiving such services?”

Partnership sites provide ST Math, a K-8 visual instructional math program, as a Tier I intervention for all students. ST Math leverages the brain’s innate spatial-temporal reasoning ability to solve mathematical problems. Students use ST Math in their regular classrooms and in afterschool programs, ideally for 60 to 90 minutes per week.

FINDINGS:

Higher levels of participation in ST Math had a continued positive impact on both 9th grade Math course outcomes and STAR Math performance, validating the decision to make ST Math a Tier 1 resource available to all students in MPS Partnership sites. The main findings related to ST Math student performance include:
Higher levels of ST Math participation as 8th graders in 2018-19 were associated with higher pass rates in 9th grade Math classes in 2019-20, and both the Medium and High ST Math groups had higher 9th grade Math pass rates than did all first-time 9th graders at their three comparison high schools.

9th grade math pass rate
For Semester 1 2019-2020 by 8th grade ST Math Progress Level from 2018-2019

Despite relatively few students enrolled in Partnership sites being On Target, higher levels of ST Math participation were associated with higher probability of being On Target on STAR Math. In particular, being in the High category of ST Math participation (30% progress or greater through the ST Math curriculum) was clearly associated with higher probability of being On Target.

Rates of students on target or above on STAR Math
by ST Math Progress Level and by Test Season for 2015-16 through 2019-20

Students in the High ST Math participation category were more likely to get grades of A or B in their 9th grade Math classes, and less likely to get a D or F.

9th grade math marks
For Semester 1 2019-20 for 8th Grade Partnership Students from 2018-19 by Average ST Math Progress Level

Students who got better math course grades (A, B, or C) as 9th graders had made more ST Math progress as 8th graders. The data showed a generally positive association between ST Math participation as 8th graders and 9th grade Math course grades.

9th grade math final marks
For Semester 1 2019-20 for 8th Grade Partnership Students from 2018-19, by Average ST Math Progress Level

Learn more about how ST Math is making a positive impact on future outcomes for students: stmath.com/impact/studies
Read the full study here