

Eighth Grade Math Proficiency Factor Details

	Interventions for Struggling Learners	Teacher Effectiveness	School Culture
Definition	Students who have math deficits require early and targeted academic interventions.	Teacher quality greatly affects whether students master math content.	School culture is correlated with student math outcomes.
Impact	<ul style="list-style-type: none"> • Students who receive interventions that appropriately address their deficits are able to score proficiently at grade-level, while students who do not receive interventions fall increasingly further behind in each grade level 	<ul style="list-style-type: none"> • The difference between effective and ineffective teachers can result in months of learning lost or gained for students each year 	<ul style="list-style-type: none"> • Schools with poor culture ratings suffer from lower student achievement, and the inverse is also true
What's going well	<ul style="list-style-type: none"> • Schools that have the autonomy/flexibility to create time in their schedules for interventions • Comprehensive programming for interventions • Mindsets oriented around importance of interventions • Focus on conceptual math interventions, not just procedural 	<ul style="list-style-type: none"> • Heightened external expectations • Select teacher preparation programs • Select professional development • Knowledge of best practices • Comprehensive curriculum/resources/materials (ie, Eureka) • Coaching • Rigorous content (with CCSS) • Extra-curricular links to content • Emphasis on teaching problem-solving 	<ul style="list-style-type: none"> • Schools with STEAM certification • Social-emotional learning (SEL) programs • Positive behavioral interventions and supports (PBIS) programs • Awareness of equity issues within the school and community • Established/varied extra-curricular programs • Involved/engaged parents/communities

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Forces depressing gains	<ul style="list-style-type: none"> • Funding for positions (interventionists or time in teachers' schedules) • School staff's capacity (knowledge and time) • Inappropriate identification of students • Poor teacher/staff assignment to intervention role • Lack of implementation fidelity • Irrelevant/not research-based interventions • Lack of training for interventionists • Lag time between student data results and targeting and providing interventions • Poor quality of interventions chosen 	<ul style="list-style-type: none"> • Poor leadership • Low content knowledge • Teacher's own math anxiety/ poor previous experiences with math • Lack of engaging instruction translates to "math is boring" for students • Poor classroom management skills • Lack of time to collaborate with colleagues • Lack of curricular resources • Frequently changing policies at federal, state, district levels create instability in expectations 	<ul style="list-style-type: none"> • Over-emphasis on testing • Apathy from stakeholders • Disproportionality in discipline data • Racial inequities • Lack of positive relationships (amongst all stakeholders) • Fear-based mindsets • Low expectations • Low parental engagement • Poor leadership
Data	<ul style="list-style-type: none"> • The Algebra Project (for survey data on student, teacher, and community voices) • District budgets to assess funding allocations for interventions • EOG/MAP scores to find trends in high movers (what's working, where) • What works clearinghouse for interventions • District improvement plans 	<ul style="list-style-type: none"> • Teacher retention rates/turnover rates in districts • School STEAM certification • Curriculum exemplars that schools/districts are using (with usage/implementation rates and any student results data) • Coaching model/PD exemplars that schools/districts are using (with usage/implementation rates and any student results data) • Teacher certification status to see if teaching loads match certification areas (PSC) 	<ul style="list-style-type: none"> • Discipline data (suspensions, expulsions, from districts) • Attendance data • Culture and Climate survey data • PTA participation rate data • CIS data • Extracurricular offerings and involvement data • Funding disparities amongst schools