# Intervention Research

### Resources

- National Student Support Accelerator Website
  - The National Student Support Accelerator (NSSA) is a program of the Stanford Accelerator for Learning and EdSolutions at Stanford University. NSSA is devoted to translating promising research about how tutoring can benefit students into action on the ground.
- Us Department of Education Article
  - Assisting Students Struggling with Mathematics: Intervention in the Elementary Grades
- <u>Research for Action Article</u>
  - DESIGN PRINCIPLES FOR ACCELERATING STUDENT LEARNING WITH HIGH-IMPACT TUTORING

# Conclusions

### Intervention Model

- Group students based on skill level (regroup when needed)
- In person intervention is best with small groups
  - Research showed similar impact with 2:1 or 4:1 small groups
- Small case study showed promising results for virtual 1-1 tutoring

#### <u>Dosage</u>

- 30-60 minutes 3-5 times a week has the most impact
- Elementary students may benefit from shorter but more frequent sessions (i.e. 20 minutes, 5 times a week).

## Conclusions

### **Instructors**

- Certificated teachers are the most effective instructor but also more costly
- Interventions with paraprofessionals can be as effective as certificated teachers as long as they:
  - Receive adequate and ongoing training
  - Receive support and performance management
- Planning time should be spent intellectually planning with curriculum and not creating resources themselves

## Conclusions

### <u>Content</u>

- Instructors should have a curriculum to **follow**
- Tutoring most effective when the curriculum **aligns with classroom curriculum**
- Alignment ensures **academic language and models** are the same to support student learning
- Use **data** to identify and target **specific skill needs** for particular students.
- While students **may need remediation** on missing foundational skills, they will also **need support in learning how to apply those skills to new, grade-level concepts to accelerate their learning going forward.** Tutors must maintain a **balance** between the two with each student.

# Implications

### <u>Keep</u>

- Blended learning model
- PDs for staff: MTSS, Academics, Culture
- Model of cohorts 2x/week or 4x/week
- Emerging leader support with coaching!
- Intervention Scoreboard for observations

# Implications

### **Changes**

- For semester 1 (24-25), focus on students at emergency levels (2 or more years below) but support with pre-requisite skills needed for their math units during the day.
- More closely align vocab, models, and strategies to math during the day curriculum make explicit with staff
  - Addition Anchor Charts
  - Multiplication Anchor Chart
  - Fractions Anchor Chart
- Be more data driven with exit tickets
- Observation feedback loop with instructors
- Have focus instructors for S2 based on MOY data for students
- Ensure **all** students are at a similar skill level in **Middle School Classes**

### **Semester 2 Math Intervention**

- Have Mathnasium work with MS students who need cusp across our network
- Have our internal teachers work with cusp students (except for BUR)
  - Will vary by site after looking at grade level data and # of students

# **Mathnasium Proposals**

#### Proposal 1: \$131,000

- 100 individual students (50 students each day, 25 each session)
- Enrollment is \$10,000 for a cohort of 100 students.
- Tuition is \$1210 per student (\$121,000 total)
  - Tuition includes online software used to administer the program, learning plans, and Instructor time.
- January 29th April 26th. This accounts for 11 weeks of attended sessions by students.

### Proposal 2: \$99,560

- 76 individual students (38 students each day, 19 each session)
- Enrollment is \$7,600 for a cohort of 76 students.
- Tuition is \$1210 per student (\$91, 960 total)
  - Tuition includes online software used to administer the program, learning plans, and Instructor time.
- January 29th April 26th. This accounts for 11 weeks of attended sessions by students.

### **School Budgets**

Site	Currently Budgeted	Additional possibly available
BUR	\$50,000	\$20,000
CAS	\$70,000	\$10,000
CIS	\$30,000	\$0
EIS	\$20,104	\$10,000
KAY	\$25,000	\$30,000

### Questions

Which students do we target for Middle School intervention semester 1 next school year if they are working on prerequisite skills needed from the grade level below (e.g. 7th working on 6th grade skills)?

### **Next Steps**

- Grades and teachers highlighted in bright yellow focus for cusp kids
- Light yellow nice to have, not necessary
- Focus Mathnasium in middle school cusp

<u>Data</u>

CUSP

KAY - 5th-8th

CAS-EIS - 3rd - 6th

CIS - 5th, 6th, 8th

BUR - 6-8