all children thrive

Becki Arlington
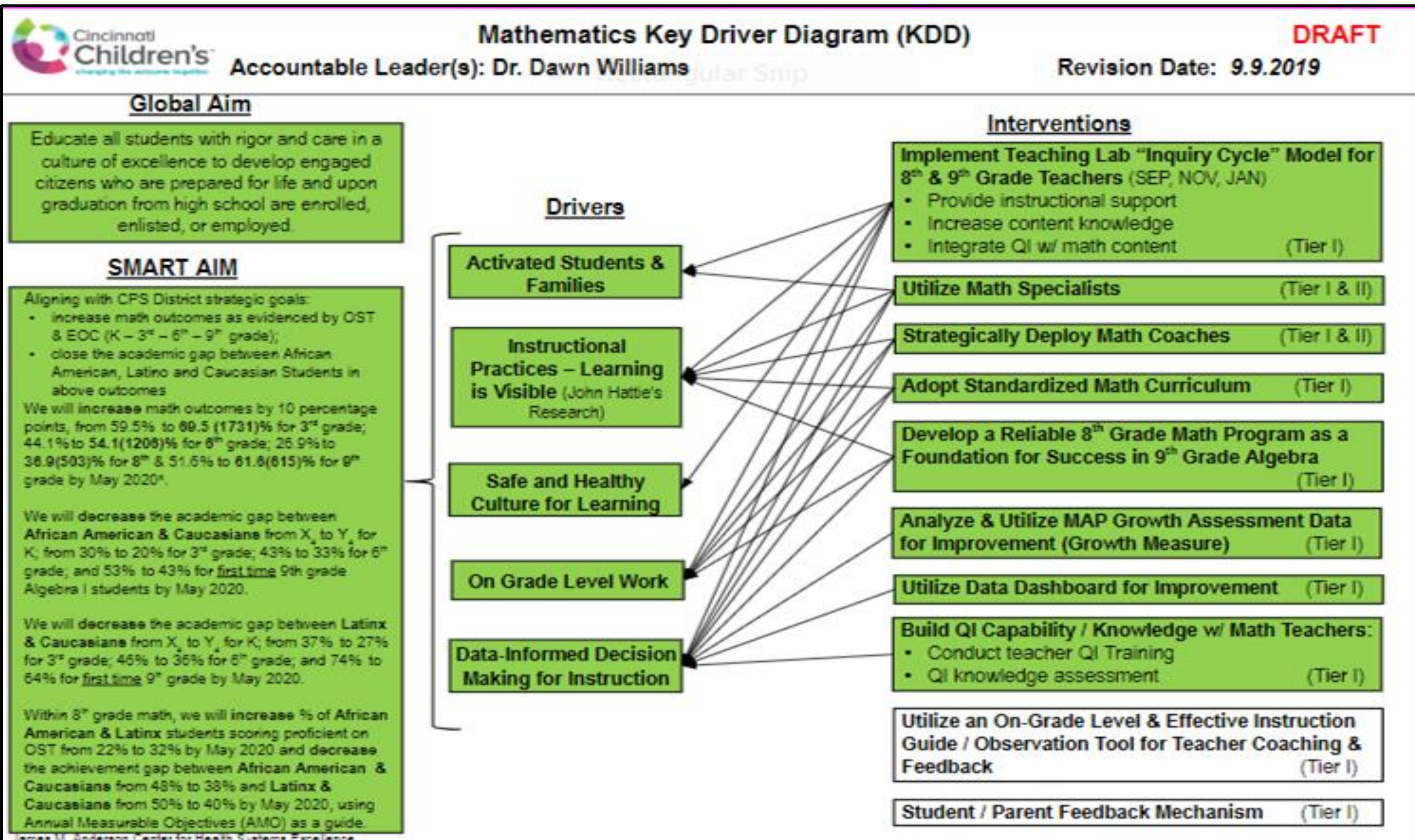
Math Specialist
Woodford Paideia

BACKGROUND

Woodford Paideia Third Grade Math MAP

Fall: 4 (10.8%) Students Proficient   Winter Goal: 24 (64.5%) Students Proficient

THEORY

Mathematics Key Driver Diagram (KDD)

Cincinnati Children's — changing the outcome together

Accountable Leader(s): Dr. Dawn Williams

DRAFT

Revision Date: 9.9.2019

Global Aim

Educate all students with rigor and care in a culture of excellence to develop engaged citizens who are prepared for life and upon graduation from high school are enrolled, enlisted, or employed.

SMART AIM

Aligning with CPS District strategic goals:
- increase math outcomes as evidenced by OST & EOC (K – 3ʳᵈ – 6ᵗʰ – 9ᵗʰ grade);
- close the academic gap between African American, Latino and Caucasian Students in above outcomes

We will increase math outcomes by 10 percentage points, from 59.5% to 69.5 (1731)% for 3ʳᵈ grade; 44.1% to 54.1(1206)% for 6ᵗʰ grade; 26.9% to 36.9(503)% for 8ᵗʰ & 51.6% to 61.6(815)% for 9ᵗʰ grade by May 2020*.

We will decrease the academic gap between African American & Caucasians from X₁ to Y₁ for K; from 30% to 20% for 3ʳᵈ grade; 43% to 33% for 6ᵗʰ grade; and 53% to 43% for first time 9th grade Algebra I students by May 2020.

We will decrease the academic gap between Latinx & Caucasians from X₁ to Y₁ for K; from 37% to 27% for 3ʳᵈ grade; 46% to 36% for 6ᵗʰ grade; and 74% to 64% for first time 9ᵗʰ grade by May 2020.

Within 8ᵗʰ grade math, we will increase % of African American & Latinx students scoring proficient on OST from 22% to 32% by May 2020 and decrease the achievement gap between African American & Caucasians from 48% to 38% and Latinx & Caucasians from 50% to 40% by May 2020, using Annual Measurable Objectives (AMO) as a guide.

James M. Anderson Center for Health Systems Excellence

Drivers

- Activated Students & Families
- Instructional Practices – Learning is Visible (John Hattie's Research)
- Safe and Healthy Culture for Learning
- On Grade Level Work
- Data-Informed Decision Making for Instruction

Interventions

Implement Teaching Lab "Inquiry Cycle" Model for 8ᵗʰ & 9ᵗʰ Grade Teachers (SEP, NOV, JAN)
- Provide instructional support
- Increase content knowledge
- Integrate QI w/ math content   (Tier I)

Utilize Math Specialists   (Tier I & II)

Strategically Deploy Math Coaches   (Tier I & II)

Adopt Standardized Math Curriculum   (Tier I)

Develop a Reliable 8ᵗʰ Grade Math Program as a Foundation for Success in 9ᵗʰ Grade Algebra   (Tier I)

Analyze & Utilize MAP Growth Assessment Data for Improvement (Growth Measure)   (Tier I)

Utilize Data Dashboard for Improvement   (Tier I)

Build QI Capability / Knowledge w/ Math Teachers:
- Conduct teacher QI Training
- QI knowledge assessment   (Tier I)

Utilize an On-Grade Level & Effective Instruction Guide / Observation Tool for Teacher Coaching & Feedback   (Tier I)

Student / Parent Feedback Mechanism   (Tier I)

LEARNING CYCLES

"Do Now" PDSA

Global Aim: 100% of third grade students will score 50% or greater on the Winter MAP Assessment

Plan →
What do we PLAN to learn?

Questions to answer with test:
Can students show a weekly improvement by practicing current grade level math skills in class and previously taught skills in a daily intervention group?

Predictions: (Qualitative & Quantitative)
100% of my students will be able to make progress on the weekly learning cycle. Students will grow by at least 1 problem (out of 6) during the weekly cycle. If students show mastery on the baseline, an enrichment piece will be added to their work.

Plan for Test
Students will complete a daily "Do Now" with 3 current grade level skills, 2 previously taught skills that students have not mastered and 1 word problem based on current work. Teacher will review one high misconception problem after each day; students will then practice grade level skills with teacher and complete intervention practice with the math specialist.

How will you measure this test? When will you collect data?
This will be measured by collecting the Monday and Friday "Do Now" activities. The progress will be plotted on the MS run chart.

Do ↓
What will we DO to achieve our goals?(strategies)

Students will...	Teacher will...
Ask questions when they are unclear	Teach with Mrs. Saddler in class
Talk to peers when appropriate	Work with small groups in class
Use various math strategies to work on problems	Give students immediate feedback when possible
Remain focused	Reteach as soon as possible
Apply best effort	
Work until completed	Create grade level and intervention stations to practice skills

Act ↑
How can we ACTivate our learning differently to continue achieving our goals? (student voice)

Plus +	Delta ▲
Interventions matched need	No school for Thanksgiving (3 days)
Used manipulatives to practice place value concepts	Afternoon group missed twice last week because of Huddle Calls
Played games to practice skills	

PLAN FOR NEXT TEST CYCLE:
- **ADAPT Test:**
  - PLANS/ CHANGES FOR NEXT TEST?
- **ADOPT Test**
  - *Select changes to implement on a larger scale & develop an implementation plan & plan for sustainability*
- **ABANDON Test**
  - Discard this change idea and try a different one

← Study
When we STUDY our data what do we see?

WHAT DID WE DO? LOOK AT THE DATA!

1. WAS PDSA GOAL/OBJECTIVE MET?
   YES   NO
2. DID CLASS REACH SHORT-TERM 5 -10 DAY GOAL?
   YES   NO
3. WHAT DID YOU OBSERVE THAT WAS NOT PART OF PLAN?
- COMPARE RESULTS TO PREDICTIONS & ANALYZE THE DATA
- SYNTHESIZE LEARNINGS:

I observed that student gaps are quite large in place Value which affects so much of what students are Required to do in math. I need to move on to other Skills but will work with the classroom teacher to make Sure that students continue to practice place value ski During station time.

Weekly Cycle

Monday: Pre Assess → small group intervention on remedial skills and small group station on current skills
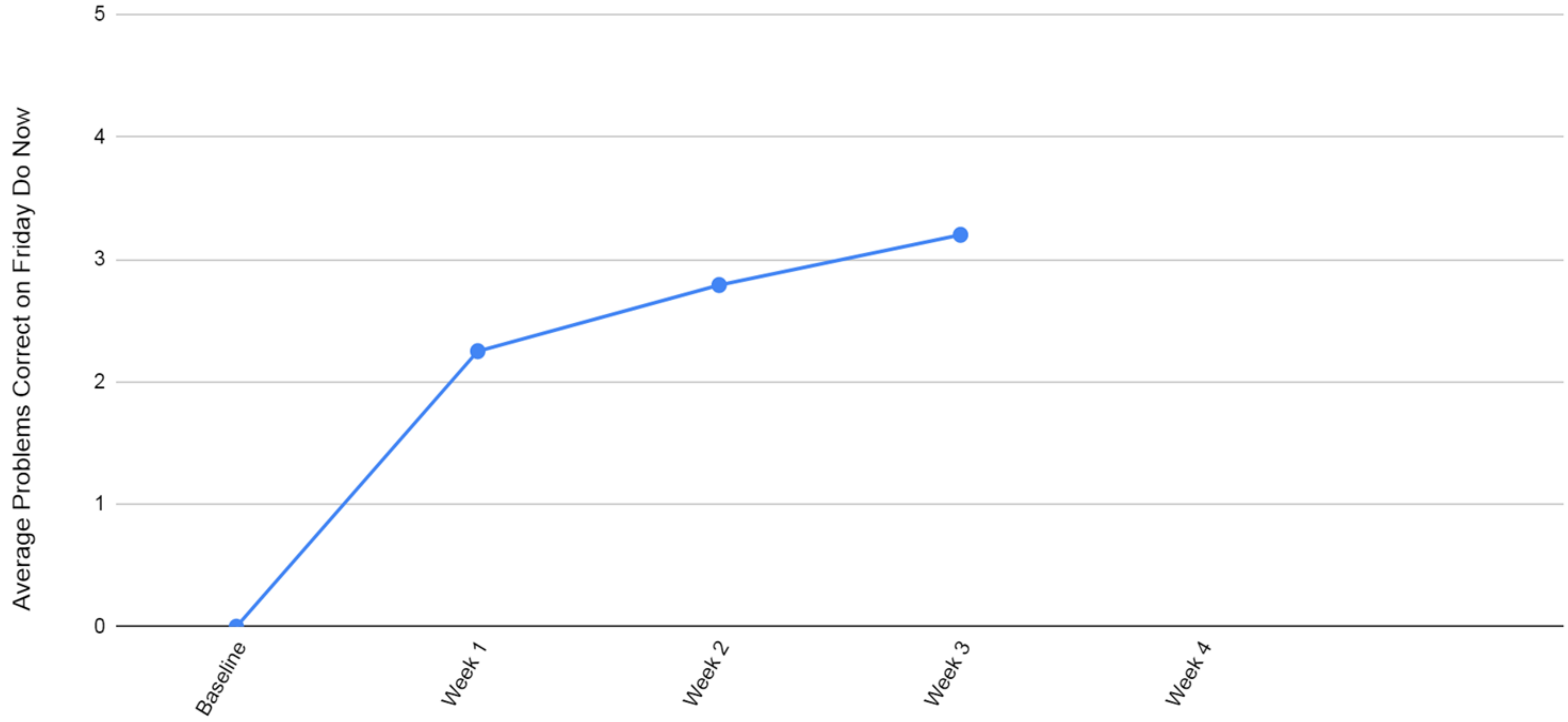
Tuesday-Thursday: small group intervention on remedial skills and small group station on current skills

Friday: Assessment and regroup students to start new cycle next week

RESULTS

Weekly Do Now Quick Check

MOST PROUD & WHY

★ Student Engagement has increased by using targeted small groups

★ Students are involved in data collection and review

★ Students are showing pride in their work and progress

★ Students are communicating what they need to be successful

GREATEST CHALLENGE

➢TIME- As a math specialist, I have limited control over setting schedules and making student groups

➢Student attendance is not good for a critical group of students

all children
thrive

TEAM MEMBERS

Name	Email
Name	Email
Name	Email