

1. SCHOOL NARRATIVE

(Brief background statement on what led to the focus of the SIP)

Julian Curtiss ranks 9th in the district as measured by the percentage of students in grades 3-5 achieving at or above benchmark on the mathematics portion of the Spring 2016 SBA, however Julian Curtiss ranks 6th in the district as measured by student growth percentile. In order to close the gap between Julian Curtiss students and the district overall, it is necessary to raise the general level of math achievement at Julian Curtiss by the end of third grade. To this end, we will focus on foundational math instruction in the primary grades K-3.

Over the last two years, Julian Curtiss has focused on writing instruction in a partnership with the Teachers College Reading and Writing Project. In order to extend our work with Teachers College and align our school improvement work with that of the district GDDT goals in 2016-2017, the Julian Curtiss School Data Team has planned to focus on math instruction this school year. Julian Curtiss teachers will utilize their knowledge bases regarding reading and writing workshop and begin to transfer that knowledge to focused math instruction.

Goals in mathematics are similar to the goals of literacy workshops. Students should not only be literate in mathematical comprehension but be able to review complex mathematical situations and understand the operational work expected. Moreover, it is crucial that students develop an affinity for mathematical thinking. In an increasingly technological, data-driven world, it is critical that we support students in becoming mathematically empowered citizens and members of the global workforce. Those who love mathematics, cherish the logic of number, space, and data, and enjoy this form of thinking, too. We seek to foster this love of mathematics and complex thinking in our students.

Strengthening mathematical problem solving ability is vital in developing logical thinkers and lifelong problem solvers. Students need to be able to work with authentic situations and approach problem solving in various ways. To achieve this, students need a variety of strategies and tools at their disposal. Implementation of the use of data from formative assessment, frequent opportunities for feedback from peers and teachers, and differentiated instruction continue to be the foundation for increased achievement for students in all subject areas.

In many ways, goals in mathematics closely mirror those in literacy, and teachers of mathematics have successfully adopted the workshop model to structure their mathematics lessons. In facilitating a workshop approach to teaching mathematics, teachers have developed structures similar to those already in place in the literacy workshops. The use of math workshop, when implemented effectively teaches students to work independently and assume responsibility for their learning. It also gives teachers valuable time to confer with learners or to work with students in small groups (Sammons, 2010).

The implementation of math workshop will also support the District Strategic Plan by helping to personalize learning for all students through the use of a standards-based curriculum, integrated digital content, and targeted small-group instruction based on data driven decisions. This structure will also incorporate student reflection and ownership through meaningful choice, based on individual strengths, needs, interests and goals.

Sources:

- Siena, M. (2009). *From reading to math: How best practices in literacy can make you a better math teacher, grades K-5*. Sausalito, CA: Math Solutions.
- Sammons, L. (2010). *Guided math: A framework for mathematics instruction*. Huntington Beach, CA: Shell Education.
- Newton, N. (2013). *Guided math in action: Building each student's mathematical proficiency with small-group instruction*. Larchmont, NY: Eye on Education.

2. STATEMENT OF STUDENT OUTCOME INDICATOR AND GPS STRATEGIC PLAN GOAL

Statement of Student Outcome Indicator:
(written as a SMART Goal)

60% of students in grades 3-5 will meet or exceed expected growth as measured by the Mathematics portion of the Smarter Balanced Assessment by Spring 2017.

All schools are required to align their School Improvement Plan with the GPS Strategic Plan Academic Goal:

“To ensure each student achieves optimal growth within the core academic disciplines based on multiple variables.”

3. ADULT ACTION INDICATOR(S):

(Written as a SMART Goal: What are the adults going to do differently to positively impact the Student Outcome Indicator?)

By May 2017, 100% of Julian Curtiss teachers will implement the workshop model of instruction as measured by self-reported surveys and observational data from classroom walkthroughs.

ADULT ACTION INDICATOR(S) RATIONALE:

(Statement of why you chose this strategy)

The shifts in practice in math with the implementation of the Connecticut Core State Standards have required our teachers to spend time learning, implementing and reflecting on new instructional strategies and practices. Our Spring 2016 math performance tasks, Smarter Balanced Assessment results, teacher observations, formative and unit assessments have indicated a need to focus on instruction in the area of math.

At Julian Curtiss, teachers have spent a number of years working to refine their practice in literacy instruction through the implementation of the Reading and Writing Workshop Model. Working to transfer the teachers' knowledge and comfort level with the Workshop structure from literacy to math will allow us to leverage the vast amount of professional learning that has taken place, and ultimately mirror the success that has been achieved through this model. "Common sense applies: good teaching practices in one subject area are likely to be equally good in another. By setting up our classrooms to foster independence, creativity,

	<p>differentiation, and risk taking, we set the tone for exemplary work in any subject.” (Siena, 2009).</p> <p>Teachers have developed classroom environments (furniture arrangements, routines, etc.) that foster the workshop structure in literacy that can be adapted to support a Mathematics Workshop Model as well. Providing specific predictable routines and schedules, as well as anchor charts for reference, helps to foster student independence. The inclusion of small group support and strategy lessons allows for teachers to personalize student learning based on the analysis of student assessment data. This part of the structure also allows for targeted intervention for struggling students (Newton, 2013).</p> <p>Providing activities based on interests and learning styles helps students to take ownership of their learning experiences. Independent and small group learning experiences also help students develop the ability to work with endurance and stamina, work collaboratively with a shared purpose, communicate effectively, and assume joint responsibility for assigned tasks (Sammons, 2010).</p>
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4. ACTION PLAN AND RESULTS INDICATORS: (SEE ATTACHED)

5. COMMUNICATION PLAN

(How and when will the SIP progress be communicated to stakeholders including parents and staff?)

Staff:

September 5, 2014 School Data Team analyzed TC rubrics and learning progressions in order to draft the SIP plan 2014-2015

September 12, September 26 and October 10, 2016 - School Data Team will discuss problem of practice and develop full plan

Faculty meetings will include review/updates on the SIP (at least four times during the school year)

School Data Team meetings (SDT) (once per month) will include regular review/updates of the SIP and Action Plans

SDT members will share information from the meetings with their grade level teams during Instructional Data Team meetings

IDT members will share progress on their Action Plans at SDT meetings

Parents/Community:

October 13, 2016- Introduction of SIP plan goal to parents/community at Open House

October 13, 2016 –SIP Parent Rep and PTA Presidents discuss how to support the SIP

November 2016 – Parent Presentation

November 2016 – Publish new SIP on website and publish goals in the school newsletter

Communicate to parents through newsletter and weekly highlights staff professional development plans for the early release days and the connection to the SIP.

Continue monthly updates on website and in school newsletter.

Meet with the parent SIP representative for a minimum of 3 sessions this school year to develop plans in which the parents serve as ambassador to the plan.

School Improvement Plan progress must be communicated to key stakeholders throughout the course of the year. Members of the team are responsible for having the plan posted on their school's website, and the SIP plan and process should be shared with the school and parent community at meetings and through bulletins, newsletters, and/or the school website.

SIP Process:

September - Draft with Staff

September/October - Review and Refine with School Data Team

November 1st - Due to Deputy Superintendent

3. SIP ACTION PLAN AND RESULTS INDICATORS

ADULT ACTION INDICATOR:

Strategies	Timeline	Person(s) Responsible	Fiscal Implications	Results Indicators C=Compliance, A=Change in Adult Behavior, S=Change in Student Performance (What data will you be collecting during the year to determine the effectiveness of your plan?)
Classroom and ALP teachers will work with instructional coaches to plan units of instruction that address critical thinking and problem solving through personalized learning experiences. 3x a year ½ day each	Sept/Oct 2016 Jan/Feb 2017 April/May 2017	Trish McGuire Brenda Brush Beth Cotter Suzanne Harvey All teachers of math	Half day substitutes for each grade level (\$450)	A=Teachers will plan units of instruction including evidence of critical thinking, problem solving, and personalized learning S=Students will demonstrate growth through their STAR assessment results; Percent of students meeting or exceeding benchmark will increase over fall baseline
Building administrators and teacher volunteers will attend the workshop "Building Math Minds - Developing the Early Numeracy Concepts" with Christina Tondevoid at Greenwich Country Day School	September 22, 2016	Trish McGuire Brenda Brush Dana Parsons Joy Carroll	None	A=Strategies from workshop will be shared with staff at faculty meeting or in grade level teams
Assistant principal will participate in a webinar titled "Digging Into Mathematical Discourse: Selecting and Sequencing Student Solution Samples" to support the "share" portion of math workshop instruction	October 20, 2016	Brenda Brush	None	A=Link to webinar recording will be provided to staff along with a summary of strategies
Teachers will participate in a PLA about the implementation of the workshop model in mathematics	November 8, 2016 (Gr. 3-5); TBD (Gr. K-2)	Brenda Brush Trish McGuire	None	A=Teachers will implement the workshop structure within their classrooms S=Students will demonstrate growth through

				their STAR assessment results; Percent of students meeting or exceeding benchmark will increase over fall baseline
Attendance at Greg Tang workshops in the district for Grades K-2	November 8, January 18, May 17	Teachers of math instruction	None	A= New learning for teachers of math instruction EZ-Traxx attendance
Attendance at Greg Tang workshops in the district for Grades 3-5	April 26, May 17	Teachers of math instruction	None	A= New learning for teachers of math instruction EZ-Traxx attendance
Teachers will use data based decision making using formative assessment to plan for small group instruction in mathematics	November 2, 2016 (presentation on data based decision making and formative assessment); IDT Meetings (November 16, 2016; December 21, 2016; January 25, 2016; February 22, 2016; May 24, 2016; June 21, 2016)	Brenda Brush Trish McGuire	None	A=Teachers will collaborate use data to plan for small group instruction and evaluate effectiveness of instructional strategies S=Students will demonstrate growth in their STAR assessment; Percent of students meeting or exceeding benchmark will increase over fall baseline
Administrators will participate in "Improving Math Instruction" Online Course (program will explore the role of school leaders, teachers, and instructional coaches in the MQI process. Participants will learn about these the specific protocols and can then practice observing classrooms and engaging in coaching conversations. This work can be done using the MQI	October 31, 2016 - November 16, 2016 (Online)	Brenda Brush Trish McGuire	\$149 per person Paid for by CIPL district budget	A= New learning for administrators Walk-through data will determine a change in implementation through the building.

or, if desired, participants' own observation instrument. Finally, participants will explore strategies for using rubric-based coaching with video capture in their own settings).				
Join NCTM and NCSM	November 2016	Brenda Brush Trish McGuire Grade Level SDT Reps	\$100 for NCSM Institutional Membership (Trish & Brenda) \$170 for NCTM School Membership (includes 6 teacher e-memberships for SDT grade level representatives)	A= Administrators and SDT representatives will share information with staff Teachers will implement selected strategies during mathematics instruction
Morning and afternoon program interventions Target students already arriving early to school.	November -June 2016	Trish McGuire	Use Supplemental funds to pay teachers to provide interventions before school. 10,000 Supplemental Funds	A=Teachers will plan personalized interventions for targeted students. S=Students will demonstrate growth through their STAR assessment results; Percent of students meeting or exceeding benchmark will increase over fall baseline
Assist CCI with math games - CCI provides homework help to students in grades 2-5.	November 2016	PTA	Monies for materials - \$300 building budget	A/S=Observation of homework club and sign-up log for students to track use of games.
Make games for K/1 and send home	December 2016	PTA	Monies for materials - \$200 building budget	S = Sign up logs for games. Increase in baseline data.
Math curriculum night	November 2, 2016	Kathy Schnefke Julissa	\$500 Achievement Gap Budget	C= Continue 3 curriculum nights per year Attendance and parent survey
Kindergarten math nights Playing math games Speaking the math language	January - May 2017	Trish McGuire Brenda Brush Instructional Coaches TBD	\$300 per night - Building Budget \$600 minimum \$1200 maximum	A= Administrators and coaches will plan specialized Kindergarten evenings Attendance data, Survey data.
Kindergarten teachers will observe an "exemplary" math workshop in progress.	October 27, 2016	Trish McGuire Suzanne Harvey 3 Kindergarten Teachers	None	A= Change in practice in classroom. Walk-through data

Develop or research self assessment for math workshop. School Data Team will develop a teacher template based on school-wide performance standards and defined best practice that will be utilized to structure teacher reflection on their progress in implementing math workshop.	November 2016	Trish McGuire Brenda Brush School Data Team		A= Change in practice S=STAR assessment; Percent of students meeting or exceeding benchmark will increase over fall baseline
Teachers self assessment of where they are in math workshop	November 2016 May 2017	All teachers of math instruction	None	A= Change in reflection practice Pre and Post Data on the survey
Walk-throughs to observe current teacher practice regarding implementation of the math workshop model.	November 2016 February 2017 May 2017	Selected staff members	None	A = Pre and Post Data
Analyze walk-through data	November 2016 June 2017	School Data Team Members	None	A= Pre and Post Data
Present/Analyze walk-through data to SDT or IDT	December 2016 June 2017	School Data Team Members	None	A= Pre and Post Data
Create a PL plan and goal setting based on walk-through data	December 2016	School Data Team Members	None	C=Professional Learning Plans for all teachers of math (PPLP)
Celebrations at Faculty meeting at least 3x during school year	January March May	Trish McGuire Brenda Brush	None	C=Schoolology Faculty Meeting Agendas
Analyze STAR data 3x a year	September January May	Classroom Teachers (IDT) School Data Team	None	C=SDT notes /IDT notes

<p>Parent /PTA support Parents will research and implement chosen strategies including:</p> <ol style="list-style-type: none"> 1. Math buddies - similar to reading buddies but playing math games 2. Help during morning program (ex: prepare and monitor math games and activities) 3. Making games for classes 4. Math Superstars 	<p>November - May</p>	<p>PTA Presidents PTA SIP representative PTA volunteers</p>	<p>\$1,000 games PTA funds</p>	<p>C=Log of Activities that take place</p> <p>S=STAR assessment; Percent of students meeting or exceeding benchmark will increase over fall baseline</p>
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