A.5 PMP Math Narrative

This narrative accompanies the school's PMP Math Plan. Although the content for math and reading are different, the best practices for curriculum, instruction, and assessment are identical. Consequently, the school will employ nearly identical research-supported strategies for developing, monitoring, and evaluating curriculum, instruction, and assessment in math and reading.

Basis for Setting Predicted Baseline Figures

The baseline figures for the school's Performance Management Plans for math were predicted by taking the average 2011 AIMS passing rates and Student Growth Percentile (SGP) figures of the 18 middle schools and high schools in the target community. For math, the average rate for passing AIMS was 59% and the average SGP was 53.

The 18 schools in the target community of central Tucson are: Academy of Math and Science, AmeriSchools Academy, Amphitheater High School, Amphitheater Middle School, BASIS Tucson, Catalina High Magnet School, City High School, Desert Springs Academy, Doolen Middle School, Flowing Wells High School, Flowing Wells Junior High School, La Cima Middle School, Mansfeld Middle School, Paulo Freire Freedom School, Presidio School, Satori Charter School, Tucson High Magnet School, and the Wildcat School

Plans for Monitoring the Implementation of the Action

STRATEGY I: Provide and implement a curriculum that improves student achievement.

The Rising School's curriculum for math will be aligned to the Arizona Academic Standards, i.e., the College and Career Readiness Standards (Common Core Standards + 2010 Arizona Additions), other Arizona state standards, and Advanced Placement. The plan for implementing the school's math curriculum begins with Chief Executive Officer/Principal, Dr. George Rising, who has a proven background in teaching, supervision, and leadership of effective instruction and student achievement. As CEO/principal, Dr. Rising will be responsible for supervising implementation of the action steps required to develop a math curriculum that improves student achievement. Dr. Rising will begin by hiring Highly Qualified teachers who are: aligned with the school's educational philosophy; demonstrate an understanding of appropriate state standards; have demonstrated content knowledge; have a history of high achievement; are organized and able to communicate effectively with students, families, and others; and are lifelong learners with critical-thinking and self-reflection skills. From among these teachers, Dr. Rising will choose one to be Instructional Leader. Dr. Rising will also supervise and monitor implementation of all operations—securing financing, acquiring facilities, contracting services, hiring non-instructional support staff, etc. —required to support instructional program.

In July 2013, the principal will work with the Instructional Leader and other teachers to develop and implement curriculum in math. The Rising School is committed to an integrated program across the curriculum, so all teachers will be "math teachers." Nevertheless, it is

expected that math teachers will take the lead in developing the math curriculum. In July, teachers, supervised by the principal and Instructional Leader, will meet to develop math curriculum and to review curriculum resources based on the CCRS. They will identify priority standards and key vocabulary for each math strand of CCRS, create a curriculum map for each math standard for each grade, create summative unit assessments that are aligned to the math curriculum, determine evaluation criteria and review possible curriculum resources. The principal will supervise purchasing curriculum resources to assist in implementing the curriculum (textbooks, student books, online supplemental resources, etc.) based on teachers' recommendations. Teachers will align purchased materials to the math Curriculum Maps for each grade.

Implementation of math curriculum aligned with CCRS will continue once the school begins operation. The principal will create a schedule for students that includes, for every grade, 1 hour daily of math instruction, 3 hours a week of study skills and tutoring, and an additional 5 hours weekly of instruction for students scoring in the bottom quartile in math. Every day, teachers will be responsible for writing and deliver daily lesson plans aligned to standards-based objectives, and the principal will supervise implementation through review of lesson plans, observation of teaching, and analysis of quarterly benchmark results and end of year exams in comparison to proposed end-of-year benchmark goals. In May, after the end of the school year, the principal and teachers will examine the data to evaluate the effectiveness of the curricula, including math, and the school will purchase curriculum/instructional resource materials needed to fill in gaps in curriculum.

STRATEGY II: Develop and implement a plan for monitoring the integration of the Arizona Academic Standards into instruction.

Much of the previous section applies here, too. In addition, the school will monitor Arizona Academic Standards into math instruction in many ways. Led by the principal and Instructional Leader, the teachers will develop a Curriculum and Instruction handbook that clearly explains expectations for lesson plans and instructional methods to be used to deliver curriculum. The principal will also develop criteria for a teacher observation form that includes an evaluation of the integration of math standards into instruction. The principal or Instructional Leader will also review teachers' lesson plans with stated math performance objectives. The principal will also monitor implementation of standards into instruction through classroom observations (announced and unannounced), wherein he will check for standards alignment with student activities and adherence to expectations in Curriculum and Instruction handbook. The principal will also ensure that unit summative assessments that are aligned to Arizona Academic Standards.

STRATEGY III: Develop and implement a plan for monitoring and documenting student proficiency.

The Rising School will monitor and document student proficiency with a multifaceted plan. The plan begins by collecting baseline and unit-assessment data. The principal will oversee the creating and administer by teachers of a diagnostic, baseline math assessment for students at the beginning of the year. The teachers will assess progress in mastery of math standards through administering unit summative assessments. Afterwards, each student will create and update a

graph for displaying results of their math mastery from individual assessment results for unit assessments.

Using this data, the principal and teachers will identify level of support needed for students. They will identify high-need math concepts to be taught during tutoring for each grade level and each tier of students based on beginning diagnostic and unit summative assessment results. Each student in bottom quartile (Tier 2 and Tier 3) in math will placed in Math Essentials, an extra intervention class, in place of an elective course. Tutors and teachers will conduct after-school tutoring for bottom quartile: Tier 2: at least 2 days a week in groups of 5 or less students; Tier 3: every day in groups of 3 or less. The tutoring includes regular formative assessments and weekly summative assessment of re-taught standards. Teachers and the principal will conduct monthly data meeting between that analyzes student progress toward standards mastery based on most recent assessment results. Monitor progress towards percentage-proficient goals. The principal will ensure that student assessment results are documented in the Student Information System (SIS) and stored for several years. Following the release of state standardized math test results, teachers adjust student grades in math courses, which are recorded in the SIS. Finally, the principal, with input from teachers and the Instructional Leader, will evaluate effectiveness of monitoring strategies, including comparing students' interim grades with state-standardized test scores, and make necessary changes.

STRATEGY IV: Develop and implement a professional development plan that supports effective implementation of the curriculum.

The school will support effective implementation of the curriculum through unending cycle of observation, feedback, evaluation, and professional development. The principal will develop a formal evaluation instrument for all teachers that is aligned to Arizona's Framework for Measuring Educator Effectiveness (AFMEE). For Group A teachers, 50% of evaluation will be based on classroom-level data, and 50% will be based on an evaluation instrument that include a rubric aligned to national teaching standards, as approved by the State Board of Education. The Governing Board will develop a formal evaluation instrument for the principal that is aligned to Arizona's Framework for Measuring Educator Effectiveness (AFMEE). 50% of evaluation will be based on school-level data, and 50% will be based on an evaluation instrument that include a rubric aligned to aligned to national administrator standards, as approved by the State Board of Education.

In July 2013, the principal, working with the Instructional Leader and consultants, will conduct two weeks of training with teachers, including norming expectations on the math curriculum and instruction and training on the AFMEE. They will also conduct topic specific professional-development sessions on best math practices specific to high need skills and concepts identified through low performance on diagnostic and unit summative tests. The principal, with input from the Instructional Leader and teachers, will evaluate the implementation of best practices for teaching math that were taught in professional-development sessions.

The principal, Instructional Leader, and peer teachers will perform informal observation of teachers in walkthroughs and longer observation, with the goal of providing constructive feedback. Throughout the year, the principal will conduct two formal observations of each teacher. Each observation includes a pre-observation conference with principal, a classroom-lesson observation of at least 30 minutes, a post-observation conference with the principal, and formal evaluation and feedback. The principal will also oversee the development of an anonymous online survey aligned to best teaching practices, which students will take. Finally,

the Governing Board will conduct a formal evaluation of the principal based on established rubric. Part of all evaluations will be suggestions for specific areas for professional development.