Performance Management Plan Narrative

Prepared by
Mountain Rose Academy and Rose Management Group

Submitted to
Arizona State Board for Charter Schools

July 19, 2012

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Introduction

Mountain Rose Academy (MRA) was opened in August of 1999. The founding of Mountain Rose Academy was a response to a very immediate need - the founders have a moderately mentally retarded son whose educational needs were not being served well by traditional district schooling. When the school first started, every student had an Individualized Education Plan. We found that it was good for special needs students and at-risk students. MRA continues to individualize instruction with its Rose Personal Progress Planner (RP-3). MRA focuses on recovering and educating disenfranchised youth who are at risk of educational failure.

Our educational system has been developed as an alternative charter high school. Arizona's State Board of Education defines alternative schools as schools educating:

- Students with behavioral issues (documented history of disruptive behavior)
- Students identified as dropouts
- Students in poor academic standing or have a demonstrated pattern of failing grades
- Pregnant and/or parenting students
- Adjudicated youth

Mountain Rose Academy (MRA) serves northwest Tucson, Marana, and other citizens of Pima County by offering the choice of access to a quality high school education for students who meet these criteria and are not successful in a traditional school environment. Although MRA is an alternative school, it is accredited by AdvancEd, North Central Association. Additionally, MRA has consistently received the highest Legacy achievement profile, Performing, possible for an alternative school.

Our Mission

The mission of Mountain Rose Academy, an Arizona Department of Education (ADE) designated alternative school, is:

Mountain Rose Academy, as an alternative high school providing credit recovery for students with poor academic standing, will
"Honor the Promise of Education"
By:

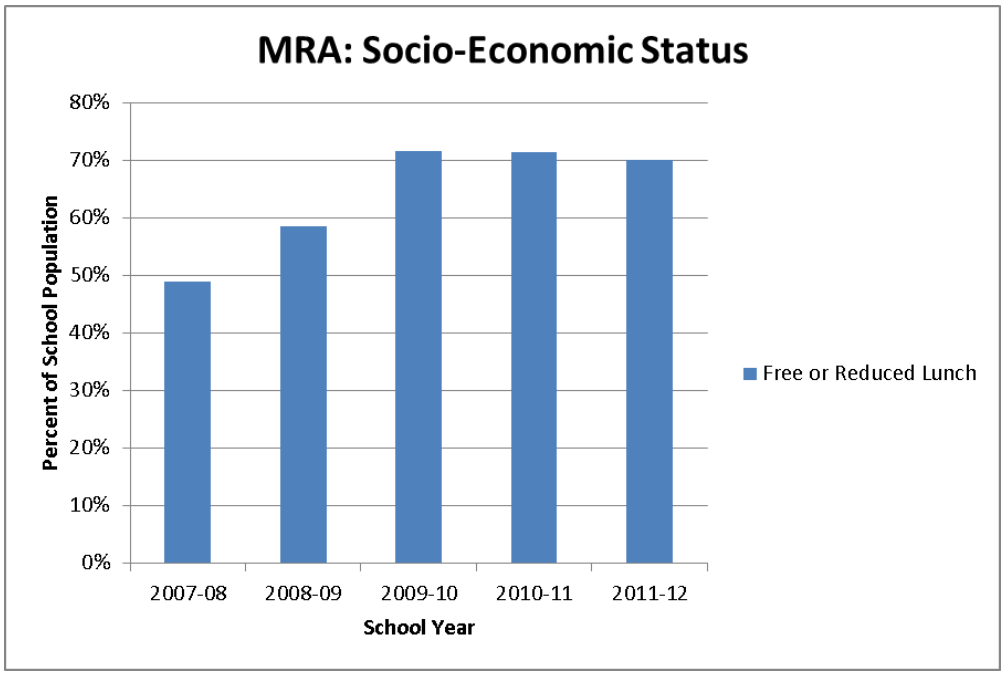
- **T**raining students in the fundamental skills needed to graduate high school, transition into continuing education or college, and explore career choices.
- **E**xpanding how students learn how to think.
- **C**reating life options / opportunities for each graduate.

Families-Students Served

Demographic data over the past five years shows that MRA is serving students who have low socio-economic status and are older than "typical" high school students.

Socio-Economic Status

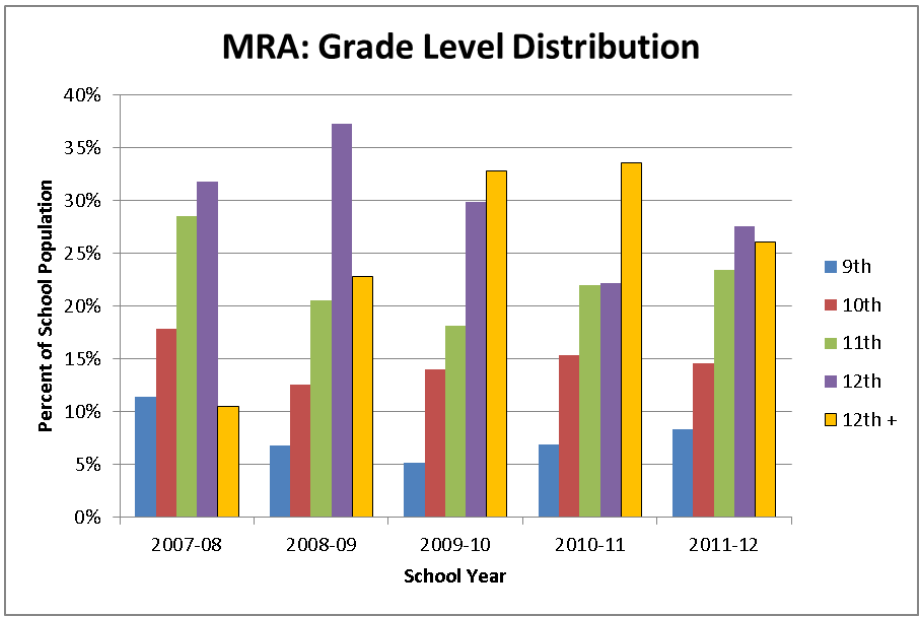
Figure A. Socio-economic Status of Mountain Rose Students for School Years 2007-2012.



We think the increase in number of students with low socio-economic status is a result of the financial crisis. Since hard times hit, we hear from our students and families about more living with relatives, income earners for the family, losing jobs, etc. Also, our students are frequently young parents tending to their children, caretakers for family members including ill or aging parents, and younger siblings, etc.

Age of Student Population

Figure B. "Grade-Level" of Student Population for School Years 2007-2008 through 2011-2012.



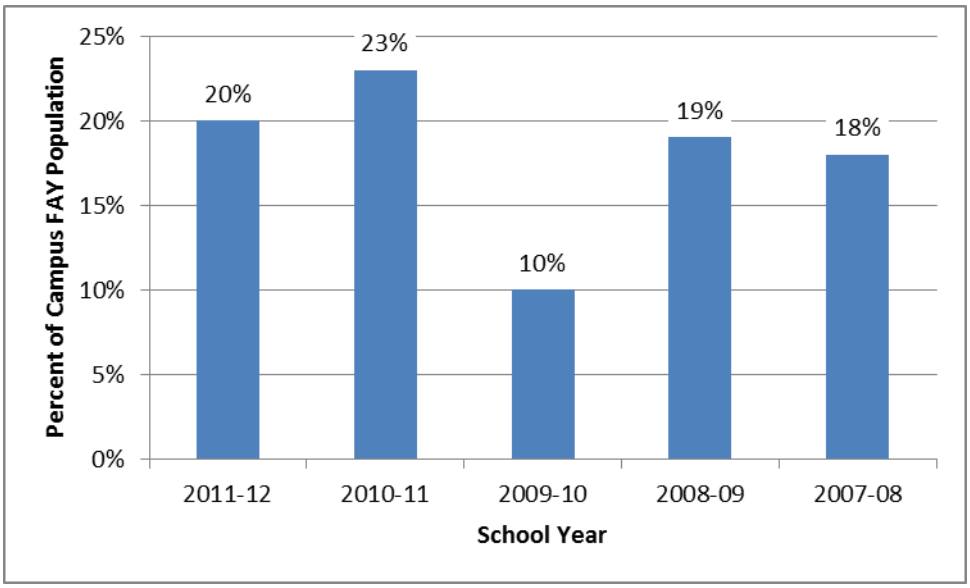
Almost 75% of MRA students are in cohorts that would make them high school "upperclassmen." The percentage of "Super Seniors" (12th +) decreased in SY 11-12 because students graduated. As a school of choice, when we experience a year with many graduates, the following year often has a slightly different age composition of students.

Serving Special Needs Students

Many students and families of students with special needs choose MRA. MRA's Special Education program has the highest rating, "meets requirements," of the four given by ADE's Exceptional Student Services department. MRA received eight out of 10 points on the most recent SPED file monitoring and continues in self-monitoring status due to our file review scores. Each school is monitored annually and can earn up to 10 points. A score of 8 or higher indicates that a school "meets requirements," and no further action needs to be taken by the state. If a school falls below the 8, with a 7 or a 6 then the school will fall into "needs assistance" and the state will review policy and/or procedures of the special education program and monitor until the school moves back into "meets requirements." A school with self-monitoring status is allowed to monitor its own compliance to the state without state intervention or "on-site" monitoring by ADE.

MRA's special needs student population in SY 2011-12 was nearly 20%.

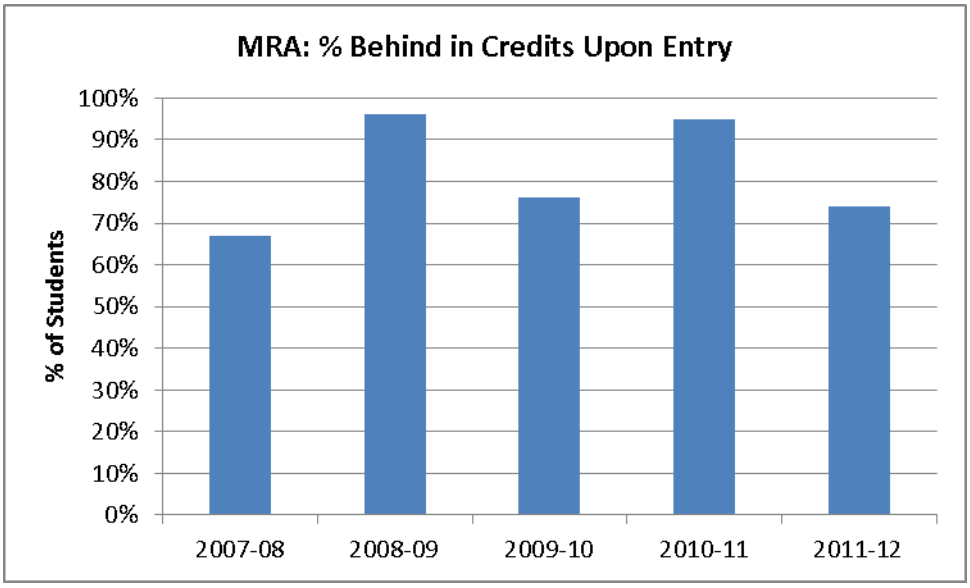
Figure C. Percentage of Mountain Rose Academy Students Identified as Special Need Students



Serving Students Behind in Credit

Enrollment data show that most students enter Mountain Rose behind in academic credit. MRA students need content recovery; students do not enter MRA with the content knowledge and skill base expected for traditional high school students.

Figure D. Percentage of Students Entering Mountain Rose Academy Behind in Credit



Summary of Improving Student Achievement, Lessons Learned & Performance Management Plan

This chart summarizes five years of action at Mountain Rose Academy to improve student achievement. The narrative after this summary provides detail, shows findings, shares interpretation, and links to the Performance Management Plan.

Figure E. Summary of Improving Student Achievement

Improving Student Achievement / Academic Year	Providing & Implementing Curriculum	Monitoring Integration of AZ Academic Standards	Monitoring & Documenting Student Proficiency	Professional Development for Effective Curriculum	"Lessons Learned" & PMP Strategies
2007 – 2008	Teachers delivered uniform & consistent curriculum using standard lesson plans in electronic curriculum + research-based Learning Strategies in small group instruction.	MRA teachers used the R.O.S.E.® curriculum, a curriculum aligned to the Arizona Academic Standards, now called Arizona's Common Core Standards. Teachers selected from existing set of lesson plans. Some lesson plans are contained in the electronic curriculum, plus we have added customized and enhanced differentiated lessons to ensure instruction is aligned to Arizona's standards.	NWEA MAP as alternative assessment. Conducted our own correlation study of NWEA MAP to AIMS. Supplemented state's AIMS Study Guide with our own ROSE Guide. Wrote report summarizing way we looked at achievement, *R.O.S.E. Evaluation of Student Achievement*	PD during preservice then daily teacher meetings taught or reinforced skills needed to implement the existing curriculum and to document student proficiency using • NWEA MAP • Research-based Learning Strategies • Rose & state AIMS guide	We needed to custom existing electronic curriculum to meet needs of our alternative school student population in AZ. We confirmed ourselves that the alternative assessment helped our students with the state-mandated test. Our definition of student achievement included post-grad activities. PD supported implementation of curriculum.

Improving Student Achievement / Academic Year	Providing & Implementing Curriculum	Monitoring Integration of AZ Academic Standards	Monitoring & Documenting Student Proficiency	Professional Development for Effective Curriculum	"Lessons Learned" & PMP Strategies
2008 – 2009	Curriculum Team created an electronic database to document alignment of our curriculum to AZ Academic Standards. When gaps were identified, materials within a course, even entire course, authored.	Principals observed teachers instructing, both in the common, shared classroom & small group session. Principals monitored standard integration using the teacher evaluation instrument, Administrative Professional Assessment Tool (APAT). Specific item on APAT monitored the integration of AZ Academic standards in instruction: *Does the teacher connect course content with state standards when instructing students?*	Continued NWEA MAP, Rose & state AIMS Study Guide. Info on AZ alternative schools from Building Charter School Quality (BCSQ) research. Student Achievement data from Performance Management Institute.	Continued 07-08 PD. Attended Building Charter School Quality Performance Management Institute. Inservice Training on Vertex-Edge class.	Even though the publisher of our electronic curriculum provided a "cross-walk" to AZ Standards, we confirmed ourselves. We found gaps & worked to fill them. We started becoming aware of national research on Alternative Education Campuses (AECs), alternative schools in Arizona. We started learning about Performance Management.
2009 – 2010	Curriculum development focused on Math in response to increased rigor in AZ 2008 Math standard. Purchase of Carnegie Cognitive Tutor workbooks & software. Curriculum maps linking Math curriculum to AZ 2008 Math standard		Continued NWEA MAP & AIMS guides. Instituted our own Model for Instructional Accountability (MIA). Began Reading Diagnosis. Contracted w/ ACSA to replicate BCSQ research on alternative schools.	Began process of changing to a data-driven school culture. Teacher meetings became more a Professional Learning Community (PLC). PLC emphasized our Model for Instructional Accountability (MIA) Year-long seminar for Reading Diagnosis.	Our definition of "pupil achievement" needed to focus more on academic achievement. Our school culture started to change to use student data to inform decisions about differentiating instruction toward student mastery of AZ Standards' Performance Objectives. Reading Specialist skills for all teachers, regardless of content area, appeared productive.

Improving Student Achievement / Academic Year	Providing & Implementing Curriculum	Monitoring Integration of AZ Academic Standards	Monitoring & Documenting Student Proficiency	Professional Development for Effective Curriculum	"Lessons Learned" & PMP Strategies
2010 – 2011	Integrated Carnegie Math materials as Response to Intervention (RTI). Began alignment of English curriculum to Common Core Standards.		Continued NWEA MAP & AIMS guides. Refined our Model for Instructional Accountability (MIA) Reading Diagnosis Case Studies Electronic version of Rose Personal Progress Planner	MRA's PLC intensified its focus on our Model for Instructional Accountability. We participated in ACSA's Data Boot Camp. Teachers received PD on NWEA MAP. New "cohort" for Reading Diagnosis.	Reading Specialist skills for teachers in our Reading Diagnosis seminar resulted in good student reading performance. Math skill mastery continued to be a challenge for our students. Our own data plus national research motivated us to switch to ATI's Galileo for additional student assessment.
2011 – 2012	Continued alignment of English curriculum to AZ Common Core Standards. Further developed Math curriculum with lessons designed to use when differentiating instruction.	APAT revised to address the new requirements of A.R.S. § 15-203(A)(38). The revised APAT continued to evaluate teachers on integration of standards in instruction.	Replaced NWEA MAP with Galileo Continued Reading Diagnosis Case Studies Started Data-Dialog Protocol Used more in-depth assessment internally Quarterly data reports tied to MIA Quadrant charts & supplemental info	Galileo as assessment system Additional PD on using data to inform instruction New "cohort" for Reading Diagnosis More frequent and increased attention to Math	This was a year of change – a new assessment system, Galileo; the AZ Common Core Standards; and the new requirements for principal-teacher evaluation. Each change resulted in action. Student reading performance was close to state average, yet we needed to continue aligning curriculum to Common Core. We used performance in evaluation, yet we needed to strengthen the monitoring of integration of AZ Standards in instruction. We intensified focus on Math, especially delivery of curriculum and PD.

Improving Student Achievement / Academic Year	Providing & Implementing Curriculum	Monitoring Integration of AZ Academic Standards	Monitoring & Documenting Student Proficiency	Professional Development for Effective Curriculum	"Lessons Learned" & PMP Strategies
"Lessons Learned" & PMP Strategies	Constant attention is needed to assure curriculum is aligned to AZ Standards, especially now that AZ Common Core Standards have been adopted. PMP Action Steps • Continue alignment to Common Core • Provide "lesson plans" using more instructional materials to differentiate instruction • Develop formative assessments within blended learning curriculum • Create summer programs for pre-requisite skill development	If a teacher did not integrate standards, the principal wrote an action plan with the teacher. PMP Action Steps in Strategy II outline process for • Teachers writing & submitting weekly Intervention Plans • Principal review of Intervention Plans • Principal use of observation protocol which includes attention to integration of Common Core standards • Curriculum Specialist work at the school to model & monitor instruction • Principal work w/ teachers, possibility of writing a Corrective Action Plan	Any "out-of-the-box" alternative assessment, whether NWEA MAP or Galileo, needs additional work to adjust for our alternative school student population. Strategy III Action Steps 2-4 target refinement of Galileo use. Further support for our data-driven school culture through • Additional data analysis tool • Focus on special needs population • Attention to Improvement in AIMS performance band	We have always had a strong commitment to PD. As our school culture becomes a data-driven culture, we are adjusting PD from daily teacher meetings to increased job-embedded use of data to improve differentiated instruction. Strategy IV in the PMP contains Action Steps for PD on • New & revised curriculum and protocols • Use of Pivot Tables for data analysis • Curriculum specialist work with teachers as they instruct students	**Offering quality education is always a process of continuous improvement. Quality education for "high-risk" students at an alternative school has increased challenges.** **Based on data analysis from the past and using information about best practices, we have targeted Action Steps that will continue to improve academic achievement.**

A. Improving Student Achievement

Since the founding of Mountain Rose Academy in 1999, we have continuously emphasized student achievement through standards-aligned curriculum and our customized-individualized instructional system that is adjusted based on data analysis. This section of the narrative highlights efforts at Mountain Rose Academy to improve pupil achievement and summarizes our work over the past five school years.

Mountain Rose Academy received the highest achievement profile label possible for alternative schools in the state of Arizona for Fiscal Years 2007 - 2011. Alternative schools received the Legacy AZ-LEARNS labels for SY 2010-2011 while the State Board of Education (SBE) worked toward approval of a parallel accountability model for alternative schools. MRA's final letter grade for FY 2012 is embargoed until August 1. We will report our 2012 label when we appear before the Arizona State Board for Charter Schools.

AZ LEARNS Achievement Profile	Fiscal Year
Embargoed A-F Label	2012
Performing	2011
Performing	2010
Performing	2009
Performing	2008

A.1 Providing and Implementing Curriculum that Improves Student Achievement

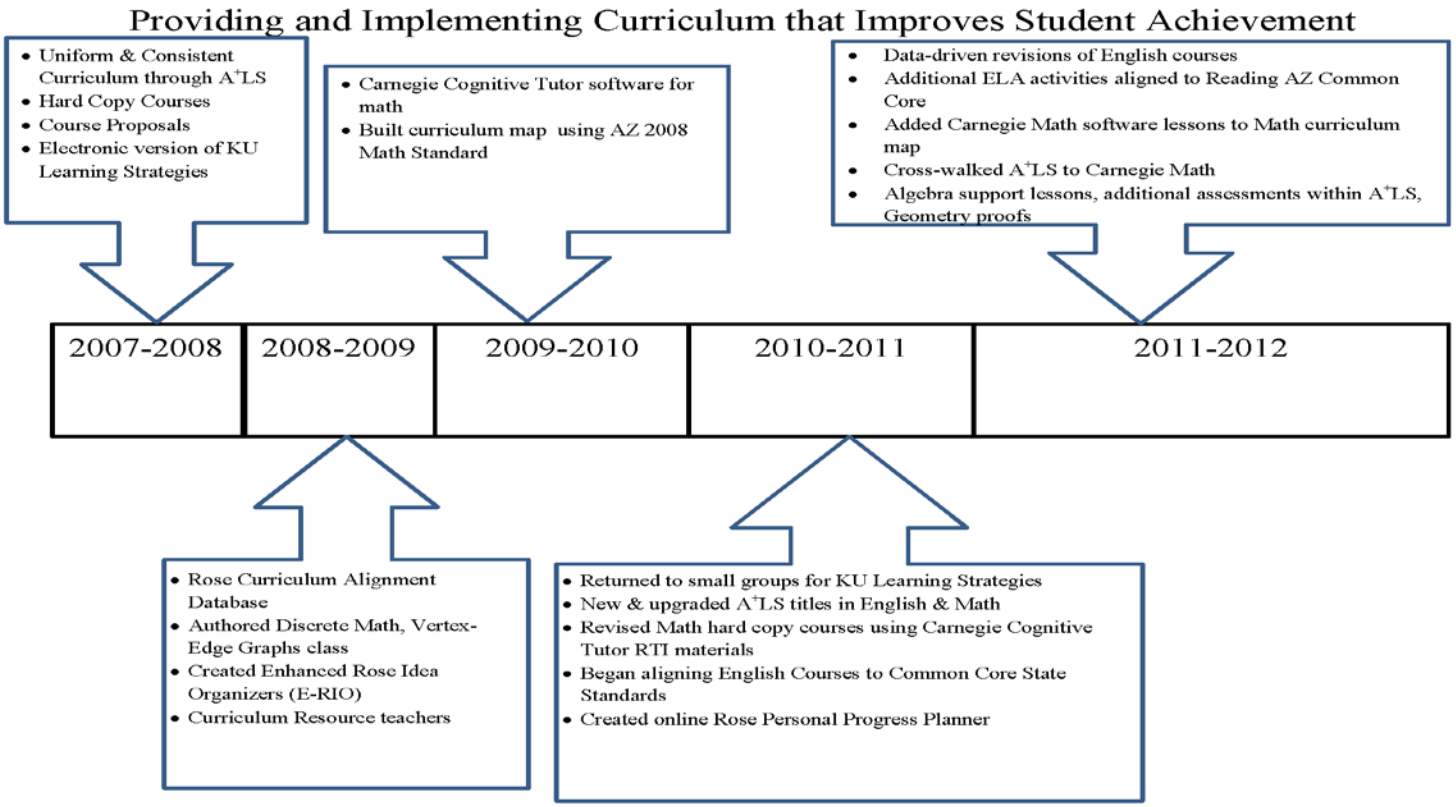
MRA selected the A^+LS electronic curriculum in 1999 because A^+LS allowed us to author, thus customize, courseware. When gaps between the out-of-the- box curriculum from the publisher and the Arizona standards were identified, we wrote additional curriculum for our schools. Beyond the publisher's standard curriculum, we have added to a course and even created entire courses, using A^+LS, to meet our students' needs and to reflect Arizona's Academic Standards as well as Arizona's Common Core Standards.

In addition to the electronic curriculum, our curriculum includes:

- hard copy courses that we have written;
- small group instruction such as the research-based Kansas University (KU) Learning Strategies; and
- course proposals, customized coursework created for individual students.

Timeline for Providing and Implementing Curriculum 2007-2012

This timeline graphic highlights each year's major activities in providing and implementing a curriculum that improves student achievement.



SY 2007 - 2008

Mountain Rose used the A+LS electronic curriculum and its own Math Standards hard-copy classes to reinforce math skills. R.O.S.E.® curriculum team created electronic versions of the research-based KU Learning Strategy courses for English classes.

All instructional materials were (and still are) uniform and consistent throughout the Rose system. When teachers at the school found an error in the A+LS electronic curriculum, they notified the Curriculum Team working at our central location, Rose Management Group (RMG). The Curriculum Team made the change and notified the school's principal(s) and teachers.

If a course proposal was used, it went to the Curriculum Team at RMG for approval. A member of the Curriculum Team checked the proposed course for content, standards alignment, and number of hours needed to complete the work. The approved course proposal then went back to the school for implementation. Approved course proposals were archived in a folder for that school year.

Teachers did not bring in their own materials to use in instruction. The teachers, through their principal, could suggest a resource to the RMG curriculum team. Resources were, and are still, reviewed for quality and alignment to state-standards.

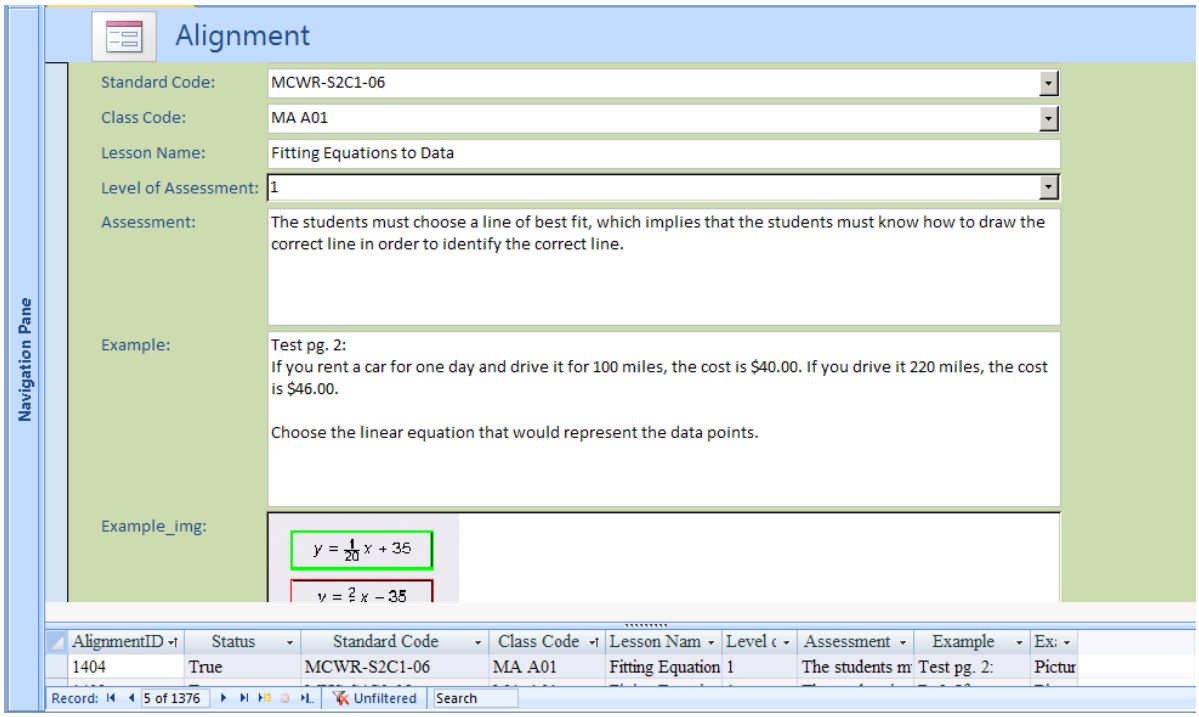
SY 2008 - 2009

RMG curriculum team worked for almost 6 months linking state standards to instruction and assessment items. AL+S provided a cross-walk, but we wanted to confirm it ourselves. We created an electronic database to show that our curriculum was aligned to the AZ Academic Standards. The standards alignment database documented the integration of AZ Academic Standards in the R.O.S.E.® curriculum. We weren't just relying on a publisher to cross-walk curriculum to standards. Our work allowed us to be confident that when a teacher taught, the teacher was teaching to Arizona's standards. When a gap was identified, e.g., AL+S did not offer Discrete Math found in Strand 2, Concept 4, of the 2008 Math Standard, we authored an entire course on Vertex-Edge Graphs. Also during the summer of 2008, the hard copy Integrated Math Standards classes were updated to reflect alignment to 2008 Math Standard, which was approved in June 2008. An example of the ROSE standards alignment database is provided for your review.

Figure F. Rose Curriculum Alignment Database

Rose Curriculum Alignment Database

- The database was created and is used to determine ROSE Curriculum alignment to the Arizona Academic Standards.
- Every standard PO is matched with an assessment question from the curriculum.
- For each entry, the database records the standard PO, class name, class lesson, assessment question, and details about how the question addresses the PO.



Another element of curriculum development was introduction of the Enhanced Rose Idea Organizer (E-RIO). We created a tool, the Enhanced Rose Idea Organizer, to develop student writing throughout the entire curriculum, all content areas. The E-RIO is used to guide student writing beyond simplistic graphic organizers and infuse writing throughout curriculum.

Based on input from teachers and the principals, the "centralized" approach for processing course proposals was not the most efficient. The superintendent changed the process in 2008-09 to train principals to review and approve course proposals. She also created the position of Curriculum Resource Teacher, teacher(s) at the school who assisted other teachers in implementing the R.O.S.E.® curriculum.

SY 2009 - 2010

With the new 2008 Math standard, MRA students needed more math remediation and more materials for individualized instruction. A+LS math courses needed to be supplemented. This led to the decision to purchase updated math courses. Carnegie Cognitive Tutor series, both workbooks and software, was purchased.

Curriculum maps were built for the Math curriculum, linking our math curriculum to the AZ 2008 Math Standard.

Figure G. Illustration from Curriculum Map Showing Algebra 1 and 2008 Arizona Math Standard

ID	Objective		Subject
MHS-S3-C2-PO01	Sketch and interpret a graph that models a given context		Algebra I Part 1
MHS-S3-C2-PO02	Determine if a relationship is a function		Algebra I Part 2
MHS-S3-C2-PO03	Use function notation		Algebra I Part 2
MHS-S3-C2-PO04	Use equations, graphs, tables, descriptions, etc.		Algebra I Part 1
MHS-S3-C2-PO05	Recognize and solve problems that can be modeled		Algebra I Part 2
MHS-S3-C2-PO06	Recognize and solve problems that can be modeled		Algebra I Part 2
MHS-S3-C2-PO07	Determine domain and range of a function		Algebra I Part 2
MHS-S3-C3-PO01	Create equivalent forms of an equation or expression		Algebra I Part 1
MHS-S3-C3-PO02	Solve formulas for specified variables		Algebra I Part 1
MHS-S3-C3-PO03	Write an equation given a table of values		Algebra I Part 1
MHS-S3-C3-PO04	Determine whether the lines are parallel		Algebra I Part 1
MHS-S3-C3-PO05	Solve linear equations and equations		Algebra I Part 1
MHS-S3-C3-PO06	Solve linear inequalities in one variable		Algebra I Part 2
MHS-S3-C3-PO07	Solve systems of two linear equations in two variables		Algebra I Part 2
MHS-S3-C3-PO08	Simplify and evaluate polynomials		Algebra I Part 1
MHS-S3-C3-PO09	Multiply/divide monomial expressions with integer exponents		Algebra I Part 1
MHS-S3-C3-PO10	Add, subtract, multiply polynomial/rational expressions		Algebra I Part 1
MHS-S3-C3-PO11	Solve square root equations involving only one radical		Algebra I Part 2
MHS-S3-C3-PO12	Factor quadratic polynomials		Algebra I Part 1
MHS-S3-C3-PO13	Solve quadratic equations		Algebra I Part 2
MHS-S3-C3-PO14	Factor higher order polynomials		Algebra I Part 1
MHS-S3-C4-PO01	Determine slope and intercepts of a linear function		Algebra I Part 1
MHS-S3-C4-PO02	Solve problems involving rate of change		Algebra I Part 2
MHS-S3-C4-PO03	Solve interest problems		Algebra I Part 2

SY 2010 - 2011

MRA discontinued use of KU Learning Strategies as Power Points and returned to small group instruction. Qualitative observations of student proficiency in exercising the strategies and applying in their core content courses indicated that KU Learning Strategies were not effective via electronic delivery. KU is a research-based curriculum with a prescribed system using small group instruction. Our tweaking of the system was not producing desirable outcomes; therefore, we returned to implementing this curriculum in small group.

We purchased several more A^+LS titles; upgraded versions of Math courses and English Skills 9-12, English Literature 9-12, and English Writing 9-12.

In 2010, we revised the Math Standard hard copy courses using Carnegie Cognitive Tutor Response to Intervention (RTI) materials and began alignment of the English courses to the Common Core State Standards. We worked on this alignment as soon as it came from ADE, so we could start implementation in the 11-12 school year.

Figure H. Illustration of 9th grade alignment of English curriculum to Common Core Standards

Reading Standards for Literature/Informational Text	
Cluster/Grade/Standard RL/RI	**Teaching Fundamentals at MRA**
Key Ideas and Details	**Content/Components**
9-10.R.1 Cite strong and thorough textual evidence support analysis explicit/inferences	**Reading** Paraphrasing-Summarizing, Reading Strategies, Story Details and Sequence,
9-10.R.2 Determine a theme or central ideas analyze in detail its development provide an objective summary	Literary Analysis ERIO Essay Reading a variety of Literature Elements of Literature Activity
9-10.RI.3 Analyze how complex character develop, interact, advance the plot or develop the theme.	Literary Analysis ERIO Essay Elements of Literature Activity
Craft and Structure	**The Form**
9-10.R.4 Determine the meaning of words and phrases figurative and connotative meanings; analyze word choices on meaning and tone. (e.g., how the language evokes a sense of time and place; formal or informal tone)	**Reading**-Analogies, Antonyms, Connotative and Denotative, Greek and Latin Words, Homonyms and Homophones, Language Arts Terms 1, Language Arts Terms 2, Multiple Meaning Words, Word Recognition, Multiple Meaning Words, Synonyms
9-10.R.5 Analyze how an author's choices concerning how structure a text, order events effects as mystery, tension, or surprise.	**Reading**- Poetry, Reading Strategies, Story Details and Sequence Author Study ERIO Essay
9-10.R.6 Analyze a particular point of view or cultural experience of world literature.	**Reading**-Greek Literature, Folklore Read Culturally Rich Literature Elements of Literature Activity Author Study ERIO Essay
Integration of Knowledge and Ideas	**Appreciation**
9-10.R.7 Analyze the representation of a subject or a key scene in two different artistic mediums	Literary Analysis ERIO Essay Elements of Literature Activity
9-10.R.9 Analyze how an author draws on and transforms source material in a specific work	Literary Analysis ERIO Essay Elements of Literature Activity Author Study ERIO Essay
Range of Reading and Level of Text Complexity	**USE/Mastery**
9-10.R.10 By the end of Grade 9 read and comprehend literature, including stories, dramas and poems	Read Classical Literature –identified in Common Core Suggested Text including *The Odyssey* and *Shakespeare's Romeo and Juliet.*

The Superintendent and Curriculum Team revised the course proposal form. We adapted the form using the Understand by Design Framework (UBD). We chose UBD because we found not all teachers were good at designing curriculum. The UBD framework provides backwards framework, so teachers start with the end in mind – for us the AZ Academic standards.

SY 2011 - 2012

We continued alignment of our curriculum to Arizona's Common Core Standards.

Language Arts Reading

- We further revised English materials for more effective implementation. Data in October showed that students were "getting stuck" at certain points in the new curriculum.
- Activities were added to Language Arts courses to emphasize instruction concerning Common Core Reading Standards "9-10 R1" and "9-10 R2".

Math

- Software lessons in Carnegie Math were added to Math curriculum map, so those lessons could be used in Math courses.
- Standards addressed in specific A^+LS lessons were "cross walked" to the Carnegie software lessons, so teachers could select a lesson to use in differentiated small group instruction.
- An "Algebra Support" course was written, using A^+LS, to complement and be taken concurrently with Algebra courses to reinforce basic algebraic concepts and standards. This anticipated the increased depth of concepts/standards and the potential "larger" gaps students may have because of the concept, grade-level shifts in the new AZ 2010 Math Standards. (A version of this course is also available in Carnegie.)
- A^+LS Course Assessments, which are different than review tests or adaptive assessments, were implemented as pre-tests and post-test student-skill/knowledge measurements as a method of assessing specific performance objectives. The ADE crosswalk for AZ 2008 Math Performance Objectives to the AZ 2010 Math Standards was provided as a reference.
- In Geometry, activities concerning mathematical proofs were sustained in anticipation of the AZ 2010 Math Standards.

A.2 Monitoring Integration of Arizona Academic Standards (Arizona's Common Core Standards) into Instruction

When MRA teachers used the R.O.S.E.® curriculum, they utilized a curriculum aligned to the Arizona Academic Standards, now called Arizona's Common Core Standards. This section of the narrative reports how we monitored the integration of standards in our common classroom and when a teacher held a small group session. As described in Section A.1, much effort took place to ensure that all R.O.S.E. curriculum was standards-aligned. Teachers selected from an existing set of lesson plans. Some lesson plans are contained in the electronic curriculum, yet we have added customized and enhanced differentiated lessons to make sure our curriculum is aligned to Arizona's standards.

The physical structure of our school is that all students are in one common classroom. At prescribed times, teachers held small group classes formed for differentiated instruction of selected students in break-out classrooms. Even when instructing differentiated small groups, individual teachers select "lesson-plans" from our uniform and consistent, standards-aligned curriculum. Individual teachers did not have their own classroom or their own "lesson plans" in a traditional sense. Standard "lessons" and materials were provided. Individual teachers did not bring in their own materials. Principals observed teachers instructing, both in the common, shared classroom and when they led a small group session. Principals monitored standard integration by using the teacher evaluation instrument, the Administrative Professional Assessment Tool (APAT). Teacher evaluation was both formative and summative.

SY 2007 – 2011

In SYs 2007-2008 through 2010 – 2011, MRA used its Administrative Professional Assessment Tool, (APAT) three times per year for teacher and principal formal evaluation.

A specific item on the APAT monitored the integration of AZ Academic standards in instruction:
Does the teacher connect course content with state standards when instructing students? (APAT for Teachers, 2007).

Each school year, the employee handbook included a page describing the teacher evaluation procedure. The following excerpt from the 2010-11 *Employee Handbook* illustrates the procedure.

As seen in this procedure, teachers were informed of the evaluation process and the principals integrated evaluation expectations during daily teacher meetings. Principal observation of a teacher's instruction was on-going. If a teacher did not meet the APAT item on connecting course content with state standards when instructing students, the principal wrote an action plan with the teacher.

Figure I. Teacher evaluation procedure from Employee Handbook

C3-HR1-P2: Teacher evaluation procedure

The ROSE approach to evaluation provides enhanced opportunities for personal and professional growth for its employees, fulfillment of the ROSE PROMISE for its customers, and growth for ROSE as a leader of education in Arizona.

	Dates & Deadlines
CEO, CFO & COO decides which payrolls include bonuses and/or incentives.	March
CEO & Superintendent determines instrument and weighting for bonuses/incentives.	July
Teacher evaluation procedures and timeline are available to teachers.	August
Teachers are informed about the evaluation process.	Pre-service
Principals use daily teacher meetings to integrate evaluation expectations in instruction.	Ongoing, starting in August
Principals document observations of teachers.	Ongoing
Principals complete 1st evaluation with action plan. Principals submit evaluation documents to Super for approval.	Nov
Superintendent approves evaluation documents Superintendent forwards documents to HR.	Nov
HR files originals in personnel files & sends confidential copy to employee.	Nov
Bonuses based on 1st APAT are issued in regular paycheck.	Nov
Principals use teacher team meetings to clarify targets for 2nd APAT	Nov-Feb
Principals complete 2nd evaluation meetings with action plan with individual teachers. Principals submit evaluations to Superintendent.	Feb
Superintendent approves evaluation documents. Superintendent forwards documents to HR & submits list of teachers earning bonuses to HR.	Feb
Bonuses based on 2nd APAT are issued in regular paycheck.	Feb
Principals complete 3rd evaluation meetings and action plan with individual teachers. Principals submit evaluation documents to Super for approval.	Feb-May
Superintendent approves evaluation documents. Superintendent forwards documents to HR, & submits list of teachers earning bonuses to HR.	May
HR files originals in personnel files & sends confidential copy to employee.	May
Final APAT bonuses for 10-11 are issued in regular paycheck.	June

SY 2011 - 2012

We revised our teacher and principal evaluation instruments, APATs, during the summer of 2011 to address the new requirements of A.R.S.§ 15-203(A)(38). The revised APAT continued to evaluate teachers on integration of standards in instruction. APAT was administered four times per year. Teacher evaluation continued to be integrated throughout the school year. The principals constantly monitored that teachers were teaching the ROSE curriculum; therefore, integrating the Arizona standards into instruction. If a teacher did not integrate standards, the principal wrote an action plan with the teacher.

Further, the MRA principals reviewed grading rubrics and supporting documentation when credit slips were processed. During review, principals ensured that student work aligned to state standards. If there were issues, the principals brought it up during the evaluation and addressed it with teachers.

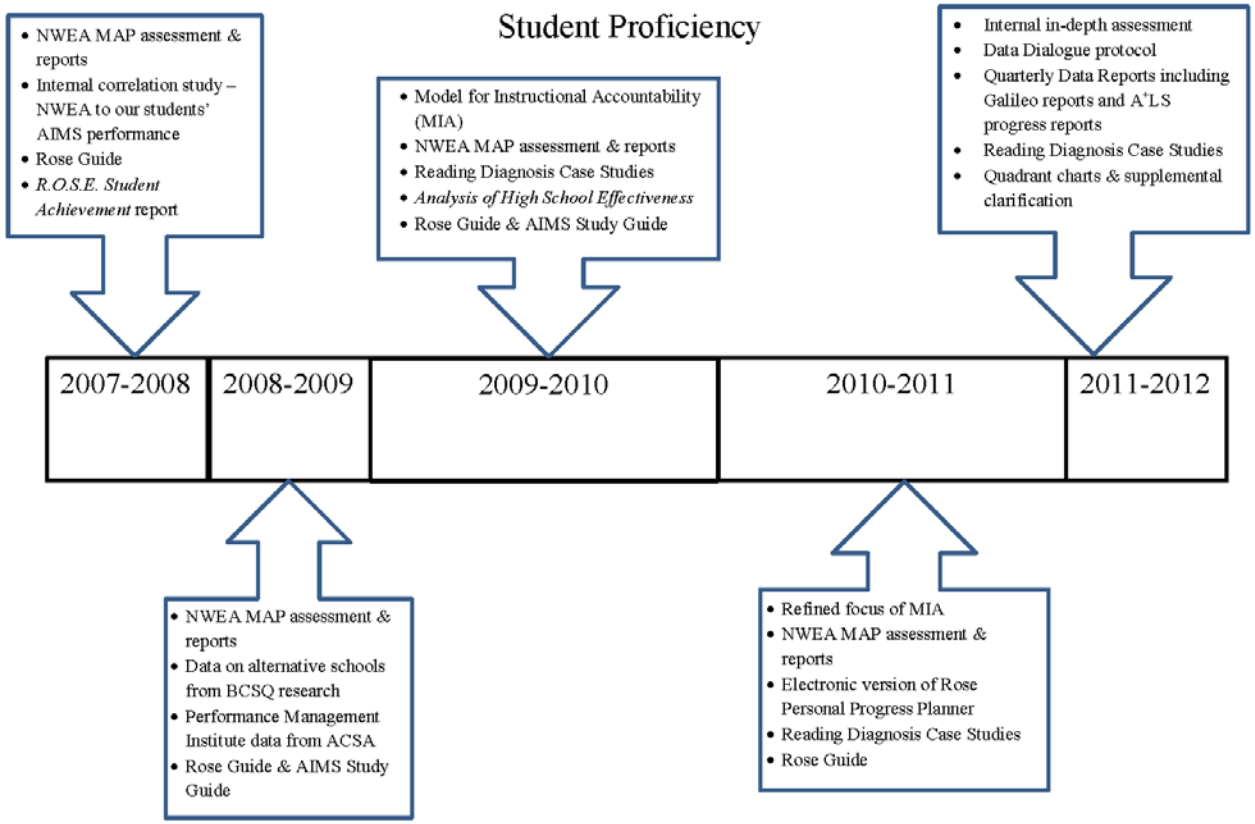
We improved the process for interviewing math teacher candidates. Candidates demonstrate their ability to instruct in a "mock" Rose setting and are assessed for their own Math skills.

A.3 Monitoring and Documenting Student Proficiency

A.R.S. § 15-181.A states "Charter schools may be established pursuant to this article to provide a learning environment that will improve pupil achievement." This section describes how Mountain Rose Academy has focused on achievement and how our emphasis on academic achievement has intensified over the past five years. We have monitored and documented student proficiency using AIMS reports, Study Guides, and developed our own Rose Guide; we used NWEA MAP, learned its limitations, and switched to ATI's Galileo for formative assessment, and we have instituted our own Model for Instructional Accountability (MIA).

Timeline for Monitoring and Documenting Student Proficiency 2007-2012

The following timeline graphic highlights each year's major activities when monitoring and documenting student proficiency.



SY 2007 - 2008

NWEA MAP

Since its opening, MRA used the Northwest Evaluation Association Measures of Academic Progress (MAP), aligned to the Arizona State Standards. We used the MAP tests for reading, language usage, and mathematics. These MAP tests provided detailed information on a student's ability in a particular content area.

Immediately after the early September administration of NWEA MAP, MRA teachers gave each student a sheet of paper that showed the student's score on the Reading, Language Usage, and Math subtests, and how the score could predict performance on the AIMS test. Even though it might seem this is just "AIMS Prep," we thought that this provided an opportunity for student motivation. Often, students only focus on passing the state-mandated test, yet teachers used results for identifying Strands, Concepts, and Performance Objectives to individualize instruction for students.

We conducted our own correlation study of the NWEA MAP (Hurtado & Schlessman, 2008). We wanted to verify information from NWEA that MAP testing was correlated to performance on Arizona's state-mandated test. However, the March 2007 report from NWEA about alignment of NWEA RIT scales with the Arizona Assessment System only reported grades 3 -8 (Cronin & Dahlin, 2007). Were MAP scores predictive of performance on the high school AIMS, the assessment of Arizona standards? We asked NWEA; their response was their research team was working on a high school report.

The following table presents findings for each Rose Academy, the number of matching scores for that school, the strength of the relationship between the two sets of scores, and the statistic we used, the correlation coefficient for each school.

Figure J. Correlation coefficient between AIMS and NWEA

School	Number of Matching Scores	Strength of Relationship	Statistic (Correlation Coefficient)
CRA	90	large, high, major	.65
DRA	71	large, high, major	.65
MRA	140	moderate, medium	.45

A correlation coefficient is a number ranging from .01 to 1.0 that reflects the relationship between two sets of data. We provided an explanation of interpreting correlation coefficients to RMG leaders to guide them when making decisions about continuing to use NWEA MAP.

ROSE Guide

As an alternative high school with most of our student population needing to repeat AIMS testing, we received the publisher reports of AIMS testing, plus the state's guide for understanding AIMS results. Our students needed clarification of the information contained in the Study Guide supplied by the state. We created our own Rose Guide. The Rose Guide breaks down the student's AIMS results to Concept and PO level; therefore, teachers could better prescribe appropriate supplemental materials to use with a student as a specific skill needed to be mastered.

SY 2008 - 2009

As ASBCS focused their definition of student achievement to academic performance (~2009), we intensified our emphasis on academic achievement. In Spring 2009, we became aware through ASBCS staff member Martha Morgan of Building Charter School Quality funded research (Ernst, 2009) on student achievement data at Alternative Education Campuses, AECs.

We continued using NWEA MAP, the state's AIMS Study Guide, the Rose Guide, and started learning how to collect reading data as part of our Reading Diagnosis year-long seminar. Since Reading Diagnosis just started in June of 2009, we describe that data in more detail in 2009 – 2010.

At the 2008 Performance Management Institute, we received student performance data from the Arizona Charter School Association. The graphs and charts showed student growth in terms of improvement in performance band on the AIMS and a scatterplot, the precursor of the quadrant charts. That information was shared with MRA principals, as well as central administrators.

SY 2009 - 2010

This was a milestone year for us as we formalized the use of data to inform our decision-making. We instituted the Model for Instructional Accountability (MIA). Throughout the year, MRA principals and teachers began to use student performance data, e.g., NWEA MAP, A^{+}LS Progress Reports, in their Professional Learning Community (PLC) meetings. *See the Data Analysis section for description of the MIA*. We continued NWEA MAP.

As part of Reading Diagnosis program, a principal and teacher compiled Case Studies on participating students.

SY 2010 - 2011

Model for Instructional Accountability

We continued and refined our Model for Instructional Accountability. *See the Data Analysis section for discussion of the changes made.*

Rose Personal Progress Planner (RP3)

We created an online version of the Rose Personal Progress Planner, our enhanced version of Arizona's Education and Career Action Plan (ECAP). We created a system where students set weekly goals toward graduation in a database. Teachers gave direct feedback to students. See the PD discussion on how principals coached teachers on implementation.

NWEA MAP

We continued using NWEA MAP assessment, so we would have an additional assessment for the school year. During this year, we did decide to switch assessment systems based on lack of Arizona high school data, e.g. NWEA's growth calculator, and research (Ernst and Turnbull, n.d.) on using NWEA with students at alternative schools. *Our rationale for switching is presented in Section C of this narrative.*

Reading Diagnosis Case Studies

MRA continued using Reading Diagnosis Case Studies with a new cohort of instructional staff. Each participant produced and used case studies throughout year. We refined the format to make it more understandable. By presenting a case study, participants could learn from one another about how to individualize instruction. *An example is provided in the Data Analysis section.*

SY 2011 - 2012

In-depth Assessments

Much has been written about the triad of curriculum, assessment, and instruction. The curriculum team worked to embed more substantial assessments into the electronic curriculum. We designed assessments with more depth, assessments beyond the multiple-choice tests that are provided "out-of-the box" by the publisher of the canned electronic curriculum. We wrote our own essay questions and problem-solving assessments that require higher-order thinking and embedded those more complex assessments into the electronic curriculum.

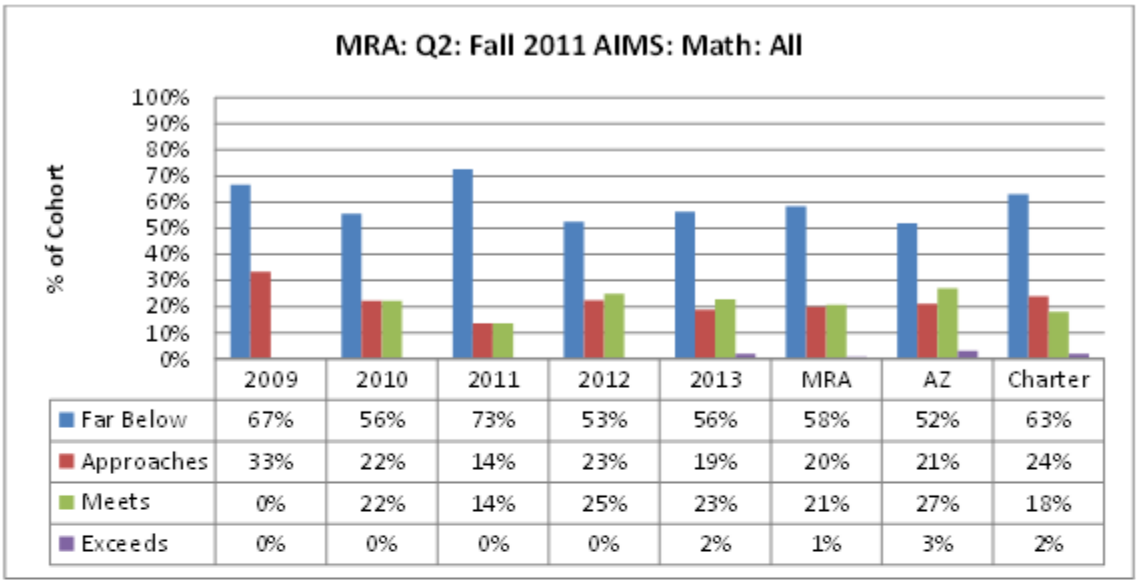
Quarterly Reports

As use of data to inform instructional decision-making continued to intensify, the Superintendent initiated use of a quarterly report. The Quarterly Data Review reported on progress toward the MIA goals and objectives, as well as other data at the school. The report included charts and graphs on:

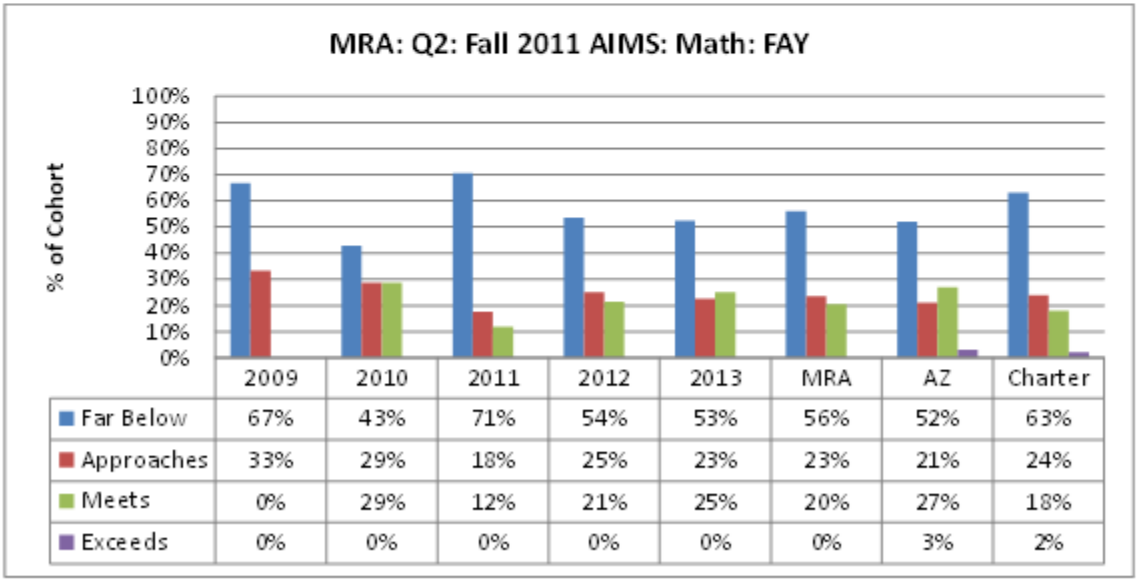
- Core Credits Earned per Student
- Core Credits Earned per Content Area
- Students Enrolled
- Academic Coaches Meeting with Students
- Students setting Personal Progress Planner goals and meeting goals
- Behavior analysis
- The Orientation Survey
- Parent Survey
- SPED Parent Satisfaction Survey
- Student Enrollment Questionnaire
- Credit Analysis
- Credits on Track
- In December - the Fall 2011 AIMS and in May, the Spring 2012 AIMS and an AIMS strand analysis.
- Galileo reports as Appendix

Figure K: Illustration from Quarter 2 Data report

Fall 2011 AIMS Report



	2009	2010	2011	2012	2013	MRA	AZ	Charter
Far Below	67%	56%	73%	53%	56%	58%	52%	63%
Approaches	33%	22%	14%	23%	19%	20%	21%	24%
Meets	0%	22%	14%	25%	23%	21%	27%	18%
Exceeds	0%	0%	0%	0%	2%	1%	3%	2%



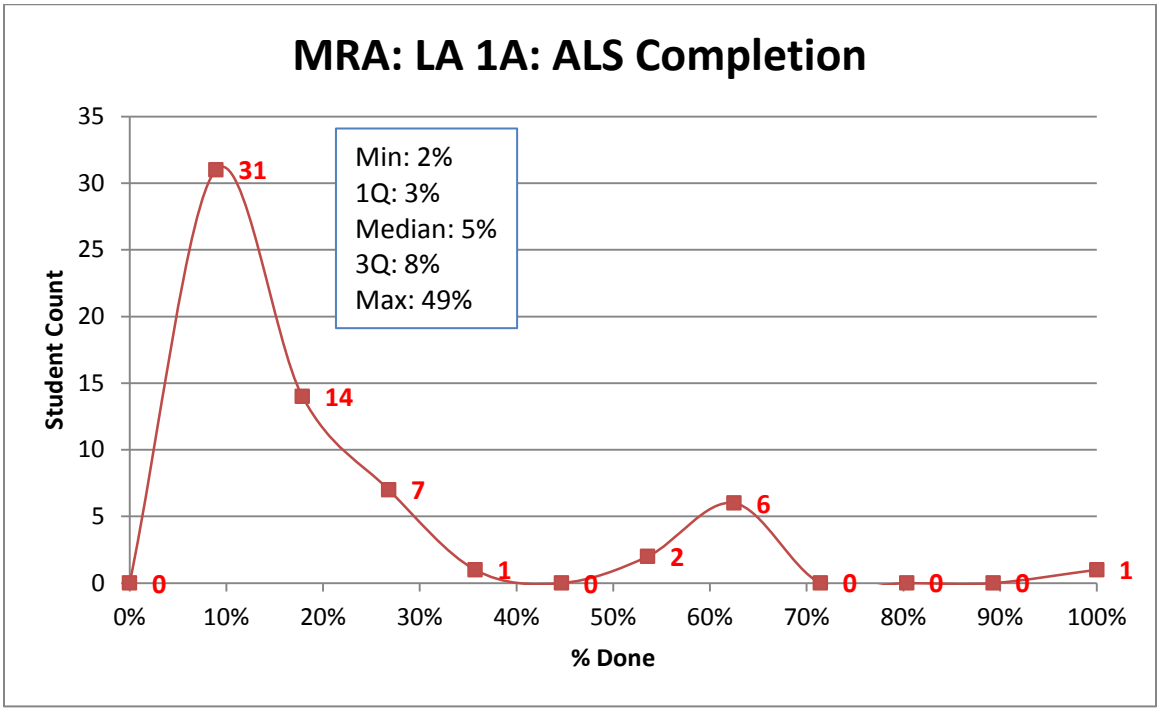
	2009	2010	2011	2012	2013	MRA	AZ	Charter
Far Below	67%	43%	71%	54%	53%	56%	52%	63%
Approaches	33%	29%	18%	25%	23%	23%	21%	24%
Meets	0%	29%	12%	21%	25%	20%	27%	18%
Exceeds	0%	0%	0%	0%	0%	0%	3%	2%

Note: the AZ and Charter scores represent "all" students and are shown only as a means of comparison.

Each quarter, a Data Review Team, the superintendents, RMG leaders, the Curriculum Team, the Data Manager, and the MRA principals, met to review the data report and talk about progress toward the MIA goals and objectives. The team talked about credit attainment, academic coaching, use of reporting, and implementation during MRA's PLC meetings.

Significant findings were identified, e.g. use of A^{+}LS snapshots to reveal dominant patterns of progress through coursework or consistent use by instructional staff of the Rose Personal Progress Planner. The Data Review Team then made recommendations, e.g. examine the A^{+}LS Progress Snapshot more frequently and analyze for significant patterns, develop a teacher's guide for the new (more rigorous) English curriculum, create a roles and responsibilities chart for use of data within the school.

Figure L. An illustrative A^{+}LS Progress Snapshot from 1st Quarter 2011



Data Dialogues

Principals and teachers used the 33 minute data dialogue as a method to make data-driven decisions for curriculum & instruction.

Reading Diagnosis Case Studies

Teachers who participated in the Reading Diagnosis program wrote case studies about selected students.

Quadrant Charts

Mid-year, we obtained quadrant charts from the ACSA website,
https://azcharters.org/academic-achievement-charts
These charts plot the percent of 10th grade Full Academic Year (ADE definition through FY 2011) passing the AIMS and the school's Median Student Growth Percentile. The charts are found in C. Findings from Data Analysis.

A.4 Professional Development to Support Effective Implementation of Curriculum

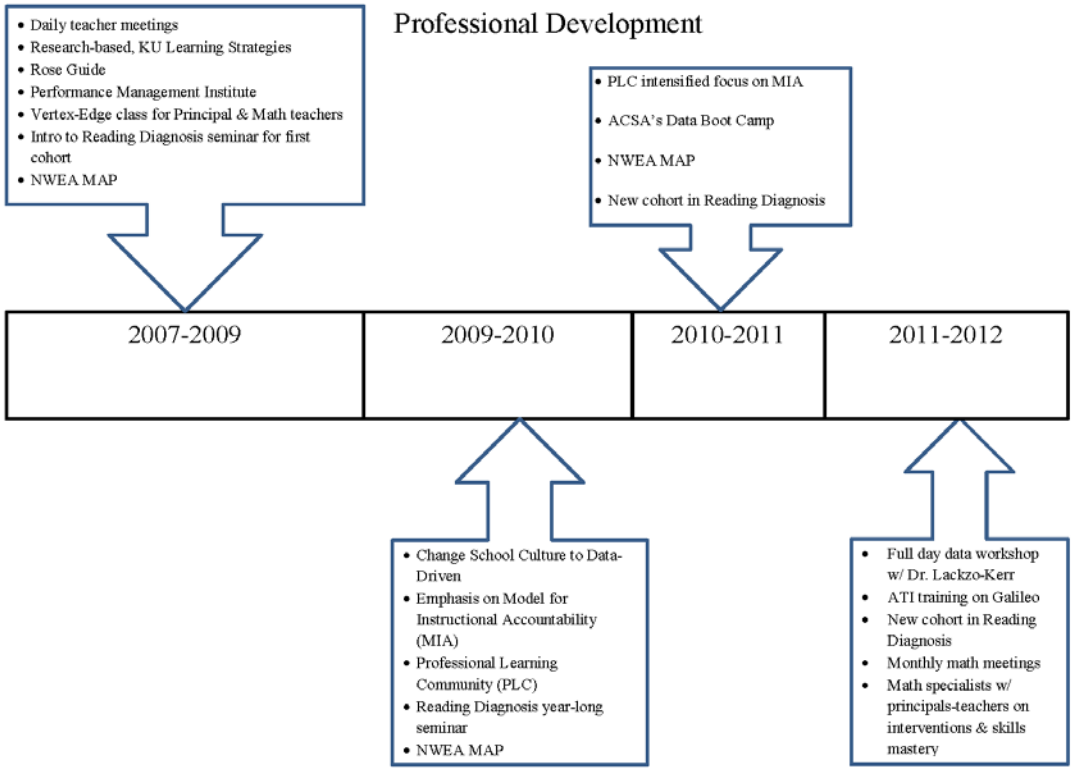
MRA has a strong commitment to Professional Development of both principals and teachers.

Every year there were preservice sessions and then follow up throughout the year on the Principal and Teacher evaluation instruments, the Administration Professional Assessment Tool, (APAT).

Preservice and inservice professional development on NWEA MAP was given every year from SY 2008 – 2009 through 2010 – 2011.

Timeline for Professional Development

The following timeline graphic highlights each year's major professional development activities.



SY 2008 – 2009

PD for teachers included preservice, full day inservices, and daily teacher meetings. These daily teacher meetings were not intended to be just "staff meetings," or to focus only on management issues. Daily teacher meetings give instructional staff time during the day to talk about individual student needs or successful techniques for working with students.

R.O.S.E.® invested time and money to have a member of the Curriculum Team go to Lawrence, Kansas, to be trained in the Kansas University Learning Strategies. The KU Learning Strategies are used to develop language arts skills in areas like Sentence Writing, Note Taking, and using mnemonics to remember content. Such skills help students improve proficiency within content areas. MRA used a "train the trainer" model to implement these strategies; our Curriculum Team member came back and then trained teachers to use the KU strategies.

Teachers received inservice and follow-up in daily meetings on using Rose Guide with students.

We participated in the Performance Management Institute offered in September 2008 as part of the Building Charter School Quality federal grant. We received data, presented as pie charts & scatter plots. By participating in the Institute in September, we were introduced to the concepts behind and the language of Performance Management. We anticipated that Performance Management would be the future direction of accountability for our authorizer and wanted to start preparing.

In May, we provided PD to principals and math teachers on the Discrete Math, Vertex Edge Graphs class we had authored.

Throughout the year, there was PD with principals, then teachers, on the Enhanced Rose Idea Organizer (E-RIO)

In June, an intense seminar on Reading Diagnosis, was held with the first cohort of RMG leaders, a principal, and selected teachers. We continued monthly seminars for this first cohort in the 09-10 school year. This Reading Diagnosis program specifically developed teachers into a ROSE reading specialist. Teachers from all content areas learn skills in diagnosing reading issues and responding to student reading issues through individualized instruction. In fact, the first cohort of Reading Diagnosis teachers were not English teachers, participants represented Math and Social Studies. We intentionally chose teachers from content areas other than English because we wanted to improve reading for all students regardless of content area work.

SY 2009 - 2010

Throughout year, we placed new emphasis on using data to inform instruction with implementation of MIA. Teachers and principals prepared for system-wide MIA inservice and presented in May 2010 on use of data and results they saw at MRA. The culture of the school began to change to a school that used data to inform instructional decisions.

We started becoming a Professional Learning Community. PD that used to be "teacher meetings" focused less & less on management and more on how to use data to inform instruction.

The First Reading Diagnosis cohort learned throughout the school year and shared in daily school level PLC meetings. By implementing Reading Diagnosis PD during the school year, it was job embedded - a truer PLC experience.

SY 2010 - 2011

MRA's PLC continued and placed even more emphasis on using data to inform instruction with implementation of MIA.

In August, the Superintendent and MRA principal participated remotely in Data Boot Camp lead by Rebecca Gau of the AZ Charter School Association.

A new cohort of Reading Diagnosis instructional staff provided training for the new MRA principals, plus the SPED teacher. Reading Diagnosis during the school year made it job embedded.

SY 2011 - 2012

On October 7, 2011, MRA teachers and principals participated in a system-wide training given by ACSA's Dr. Ildi Laczko-Kerr. Dr. Laczko-Kerr worked with MRA Professional Learning Community (PLC) leaders regarding:

- Data analysis, by providing an overview of the 33 minute data dialogue protocol,
- Alignment to PLC work
- Guided Practice – using Galileo data
- Independent Practice – using A^{+}LS data

On October 14, ATI provided a full day session on Galileo training.

Reading Diagnosis continued with new teachers, an English and a social studies teacher.

Monthly Math meetings for math teachers were held. The topics of these meetings are listed below:

August 2011:

Teachers practiced diagnosis of specific student needs. Activities revolved around identifying the student's miscues and prescribing instruction.

September 2011 – December 2011:

Instruction was provided to teachers focusing on Assessment, Diagnosis, and Prescription using a Test – Teach – Test methodology which included:

1. Using A^+LS "Class Assignment Test Detail (by student)" and sorted student lesson progress into groups in order to deliver specific instruction to a group of students with a similar need.
2. Tracing performance objectives from lessons that a group of students needed instruction on (based on the A^+LS report listed above) using a crosswalk developed in-house to equivalent lessons in the Carnegie Learning Online software.
3. Establishing the Carnegie General Intervention Strategy (CGIS) which used reports included in the Carnegie Learning Online software to measure student lesson progress, skill acquisition as measured by Carnegie Learning's artificial intelligence in the Skills Alert report, and reviewed how the student used the software including examples reviewed, hints used, and number of errors per prescribed problem in order to prescribe further lessons, remediation, and/or re-teaching specifically providing instruction on how to use the examples, hints, and lessons in the Carnegie learning software.
4. How to give the students a routine for practicing math skills which including a couple of variations based on: Do the Lesson, Ask Questions, Do the Problems (DAD).

January 2012 – May 2012:

Math specialists on curriculum team worked with teacher/principal teams to develop processes for reporting, planning interventions using techniques mentioned above, and helping students master skills and bridge knowledge gaps.

B. Process for Analysis of Student Achievement Data

B.1 Analyzing Relevant Student Achievement Data

In the years from 2007 – 2009, data analysis was often done at a central level and then distributed to the schools. That changed in 2009 as the school culture changed to one that emphasizes use of data. "Ownership" of data analysis needed to happen at the school level.

B.2 Types of Data Collected & Process

Types of Data, as described in A.3:

- NWEA MAP: NWEA MAP was used 2007 – 2011. We switched to Galileo for SY2011 – 2012.
- Reading & Math AIMS data each year. Starting 2010, we also used Arizona Growth Model and Student Growth Percentile (SGP) data.
- ROSE Guide
- Rose Personal Progress Planner
- If student data on NWEA MAP or Galileo, previous AIMS testing, A+LS assessments, and/or teacher observation showed low Reading performance, additional data was collected using additional instruments, e.g. Classroom Reading Inventory and/or ACE Reader software as shown in Reading Diagnosis case studies.
- Model for Instructional Accountability beginning in SY 2009 – 2010
- Quarterly Reports beginning in SY 2012

Process:

From 2007-2008 to 2008-2009, findings from NWEA MAP, A^{+}LS or internal assessments, and AIMS testing, including the state AIMS Study Guide and our own Rose Guide, was explained during inservice PD and then further discussed during teacher meetings.

Starting in July 2009, our Superintendent implemented a Model for Instructional Accountability (MIA). She modeled the inquiry process with principals, then principals continued data analysis at MRA with the teachers. The daily "teacher meetings" started becoming more of a Professional Learning Community (PLC) as time spent switched from management issues to more emphasis on use of data for instructional improvement.

In the Reading Diagnosis year-long seminars, principals, curriculum resource teachers, and teachers from all the content areas received reading specialist training. They used data collected from the Classroom Reading Inventory and ACE Reader as they worked with students on reading skills. The data was-is used to coach individual students, as well as discuss data in MRA's PLC meetings.

We hope that Section A, especially A.3 and A.4 communicate MRA's process of student achievement data analysis, and how our school culture has become increasingly focused on data-driven instructional decision making.

B.3 Justification of Relevance to Improving Student Achievement

Rationale for using NWEA during school years 2008-2011

Mountain Rose Academy offered its customers a nationally recognized, standardized test of reading, writing, and mathematics that

Measured academic achievement in core subject areas – reading, language usage, & mathematics

Prepared students for state-mandated AIMS test before it is administered

For these reasons Mountain Rose Academy selected the NWEA MAP to include in its District Assessment Plan.

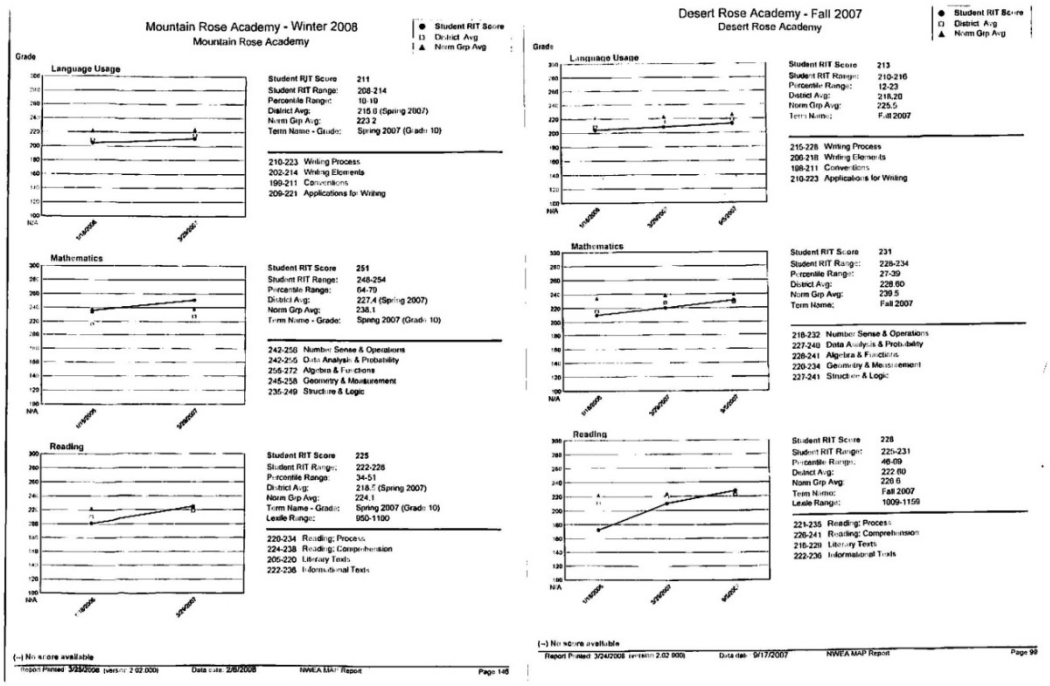
The Northwest Evaluation Association (NWEA) is a national non-profit testing organization providing schools with research-based educational growth measures. NWEA is partnered with more than 3000 partner school districts and educational agencies, administering 24 million tests to more than 3 million students.
Schooling at MRA is focused on academic achievement leading to high school graduation for college and career ready students. Our alternative setting focuses on recovering content that leads to earning credit. Students use their time to master content, so they can earn high school credit and graduate with a high school diploma documenting their readiness for continuing education, without remediation, and participation in the workforce. Passing the AIMS test is required for high school graduation. Fall and Spring AIMS scores are relevant, especially now that the State Board of Education has approved the 2012 model for alternative school accountability. MRA uses the Rose Guide to present to the student a break-down of their scores, by Strand and Concept. We were dissatisfied with using the NWEA MAP scores to predict AIMS performance. We had high expectations that using ATI's Galileo, both pretest and benchmark assessments, would provide more relevant data to improve student achievement. We experienced in SY2011-2012 that Galileo "out-of-the-box" doesn't address the needs of students choosing our alternative school setting. Our further discussions with ATI are addressed in our PMP Strategy 3.

C. Findings from Data Analysis

This presentation of data findings includes:

- NWEA MAP
- Student Achievement Charts (from Performance Management Institute)
- Reading Diagnosis Program
- *Analysis of High School Effectiveness*
- Model for Instructional Accountability
- Percent Passing AIMS for Alternative Schools

Figure M. Illustrative MAP Data:



Note:
NWEA has performed alignment studies that relate a student's score on the MAP to the student's performance on the AIMS. Those NWEA studies are limited to grades 3 – 8. RMG has calculated its own alignment of student MAP and AIMS scores. Our initial findings indicate a medium (at one school) to large (at two schools) strength of the relationship between scores on these two tests.

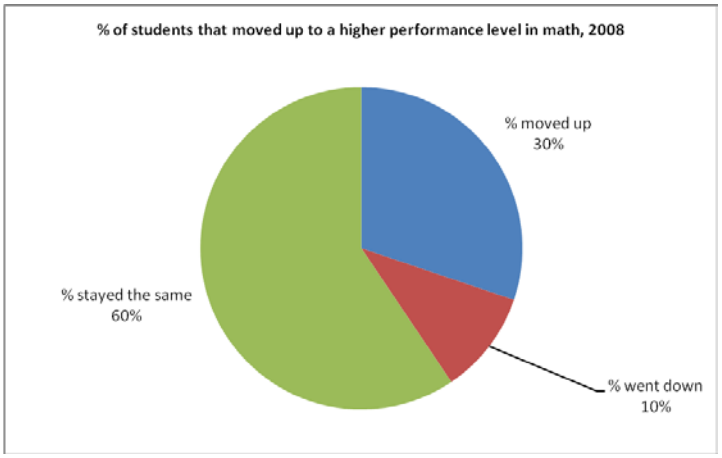
Student Achievement Charts from Performance Management Institute

We received student performance data in Math and Reading from the Arizona Charter School Association during the 2008 Performance Management Institute. The graphs and charts showed student growth in terms of improvement in performance band on the AIMS and a scatterplot, the precursor of the quadrant charts. As mentioned in A.3., this data was shared with school principals as well as RMG administration. At this point, however, we were not sure how such data would be used at state level. We attended many Arizona State Board for Charter Schools meetings to increase our understanding, so we could communicate with our principals and teachers.

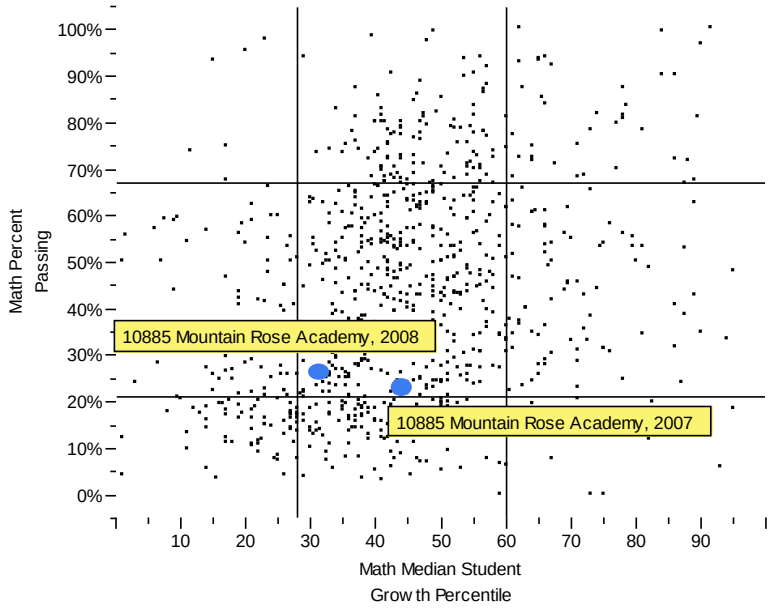
Figure N. Student achievement charts from 2008 Performance Management Institute

Math Performance

School is above state average for % of students that moved up to a higher performance level in math in 2008



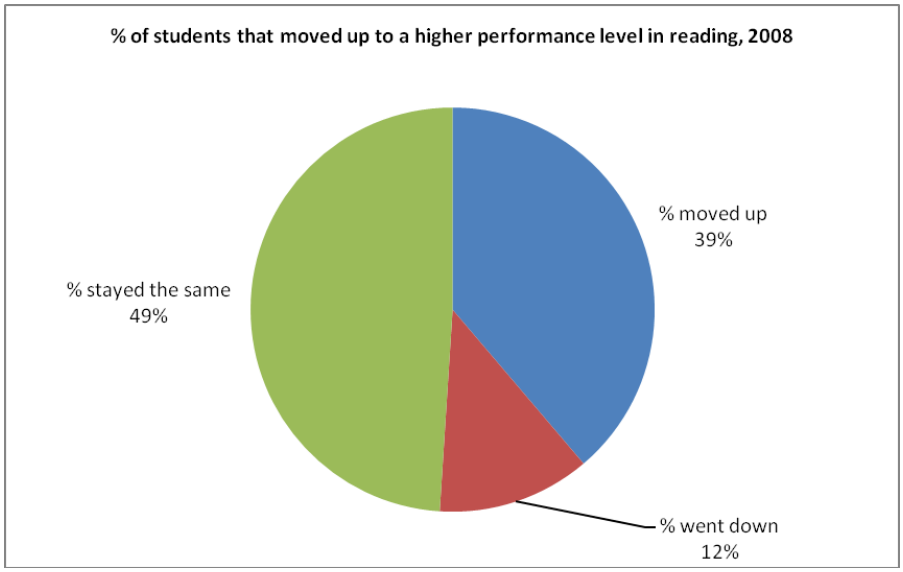
The school is at the state average for the percent of students passing and at the state average for the rate of growth in math in 2007 and 2008.



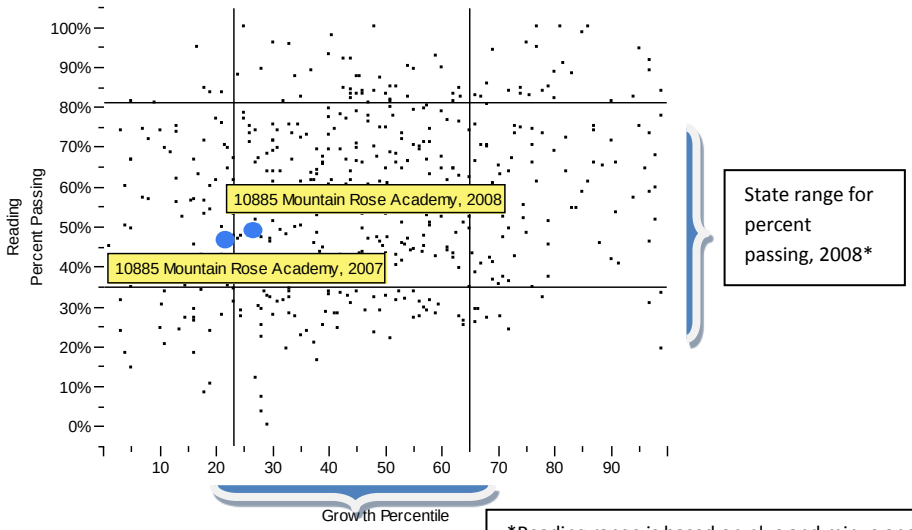
**Math range is based on plus and minus one standard deviation from the median of 44 (+/- 1 SD) and encompasses median growth rates between 28 and 60, and AIMS passing rates between 21 and 67 percent of students at the school.*

Reading Performance

School is above the state average for % of students that moved up to a higher performance level in reading in 2008



The school is at the state average for the percent of students passing and at or below the state average for the rate of growth in reading in 2007 and 2008. Note that growth only reflects students who took the HS school test more than once.



*Reading range is based on plus and minus one standard deviation from the median of 44 (+/- 1 SD) and encompasses median growth rates between 23 and 65, and AIMS passing rates between 35 and 81 percent of students at the

Reading Diagnosis Program

As part of the Reading Diagnosis program, participants compiled Case Studies on targeted students. Case studies were produced and used by each participant throughout year. In addition to learning about their needs of individual students, presentation of and discussion of case studies allowed Reading Diagnosis participants to learn from one another about how to individualize instruction.

Figure O: Excerpts from report, I'd Rather Read on Reading Diagnosis

a section on reading; other indicators of academic performance like coursework; and a case study put together for individual students. Based on all this data, TECies diagnose what the individual student needs to improve reading and how to customize strategies to reach the student's reading goals.

Effective Strategies

Individualized strategies, such as choral reading, the ACE Reader software program, inclusion (Venn diagrams) student-made flash cards, develop a student's

- comprehension,
- vocabulary,
- fluency, and
- word recognition.

The student has ownership of the process by committing to reading improvement and setting goals for each area of improvement. TECies spend five to fifteen minutes each day, one-on-one, with a student. A Test-Teach-Test format is used. A pretest is administered; brief instruction is given; and then students see immediate results on a post-test. A student works with the TECie, and independently. Weekly progress is charted, and the student and TECie have a regular, weekly meeting to review progress. Goals and objectives are reviewed and revised based on effectiveness of strategies.

Promising Outcomes

We are very excited about the preliminary results of our pilot reading program. The number of students in this first cohort is small because our learning community is still mastering the system. Still over half (57%) of participating students who retook the state-mandated test passed the reading section. All of the students who passed are non-majority, and most are female. Research indicates these are demographic groups disproportionally experiencing

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negative effects of state exit exams (Viadero, 2009). Even though we focused on reading, most of the students who passed the reading section also passed the writing section.

Reading Categories on State Mandated Exam	Pre-Reading Program % correct	Post-Reading Program % correct
Reading Process	13%	50%
Vocabulary	0%	50%
Comprehension Strategies	25%	50%
Comprehending Literary Text	61%	83%
Elements of Literature	50%	86%
Historical and Cultural Aspects	100%	75%
Comprehending Informational Text	54%	71%
Expository Text	42%	75%
Functional Text	63%	75%
Persuasive Text	63%	63%

This example of a female, Hispanic student's progress on the state-mandated exam quantifies her improvement. She passed the reading, and the writing, sections on the exam.

Qualitative data, like the title comment or this one from a student's mother to a principal, are extremely satisfying.

> I attempted to contact the student at home, but the number did not work. I attempted to contact his parents and was able to talk to his mother. I asked if I could contact [the student] at home to ask him questions about his reading. She said that they did not have a home phone right now.
>
> She went on to say that she is very impressed with [the student's] desire to read. She remarked that his enjoyment of reading has increased to the point that she rarely catches him playing video games; he's usually reading! She also mentioned that he asked for books for Christmas rather than video games!

The best summary is in the principal's own words, "Wow! Great job of sparking his desire to read!"

Appendix A

Sample Weekly Progress Chart from a TECie whose content area is math.

TEC-ie Name:	**Student's Name:**	Dates: 10/5-10/9 *Week 5*

Motivation:
(3) Student has described how his reading has improved overall: schoolwork is becoming easier and he is even able to read newspapers outside of school and understand them.
(2) Student maintains his motivation for this program by continuing to practice his flash cards, read his book outside of school, and applies the tools he has gained to the rest of his schoolwork.
(1) Student feels that he is approaching his goals both in terms of speed and comprehension. In fact, his average reading speed is now at 250-280 wpm, which is the target speed for a 12th grader.

Strategies Used:
Comprehension: Comprehension Flash Cards. *Student chooses two new words from the EDL Vocab list that are either similar or opposite, and supplies the word generic to both words.*
Comprehension: Leveled reading summary: Definition: *The student summarizes reading in terms of: (1) plot, theme, or overview, (2) events, actions, or context, and (3) people, places, or items.* The "pretest" is the teacher evaluation of the previous day's work; the lesson is a discussion of how to improve the summary, and the "post-test" is the student's redo/improvement of the summary.
Fluency: Ace Reader: *Tachistoscope flash game & eye-span game, done for 15 min between Comprehension Tests (as pre and post test).*
Vocabulary: Prefix/Suffix Card. *Continuing through the standard prefix list.*

Progress Made:

- **Comprehension:** Student forgot to bring his flash cards two days out of the week. No meaningful results this week. Spot verbal checks showed that he understood the concept of similarities, opposites, and inclusion. He simply forgot his cards.
- **Comprehension: Leveled Reading Summary:** Student is doing his daily reading. He is refining his ability to effectively identify a "why-overview" vs. "what/how – details".
- **Fluency:** Student is now at "12th grade" reading speed. He has more than doubled his IRI reading speed from the first IRI test using 10th level reading material.
  - ***Monday:*** Pretest: 75% comp. @ 110 wpm; Posttest: 100% comp @ 110 wpm
  - ***Thursday:*** Pretest: 25% comp. @ 280 wpm; Posttest: 25% comp @ 280 wpm
  - **Vocabulary:**
  - Prefix Flash Cards: 62% of prefix list mastered as of Thursday.

External Factors:
Student holds a full time job outside of school as a shift leader, but this does not appear to impact his performance in Rose-TEC. Thursday, he forgot to bring his flash cards & book reading log to school, and so I was only able to verify his Ace Reader work for that day.

Retroduction:
Student feels that he is reaching his reading goals: he can read more than twice as fast as he did on the IRI, sound out difficult words consistently, and make more sense of what he is reading. Student feels that both Ace Reader and the flash cards are effective tools to improve his reading.
The focus now will shift to boosting his comprehension, now that his reading is up to an acceptable speed. He understands the concept of similarities and opposites. I think it's a good time we introduce him to building simple analogies.

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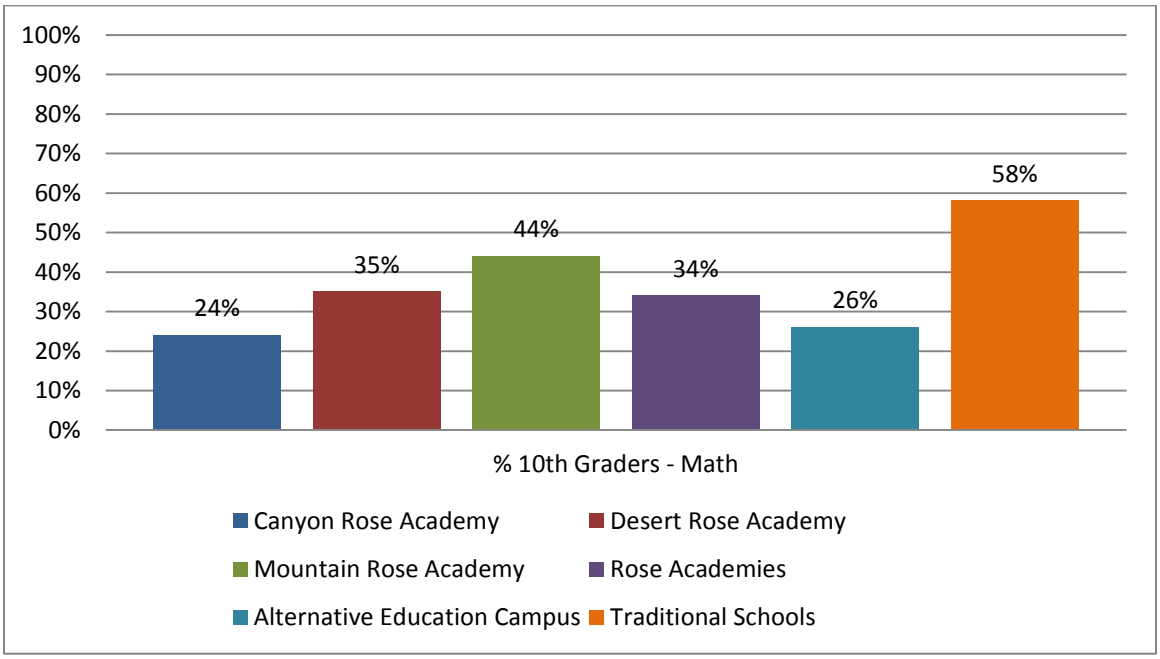
Analysis of High School Effectiveness

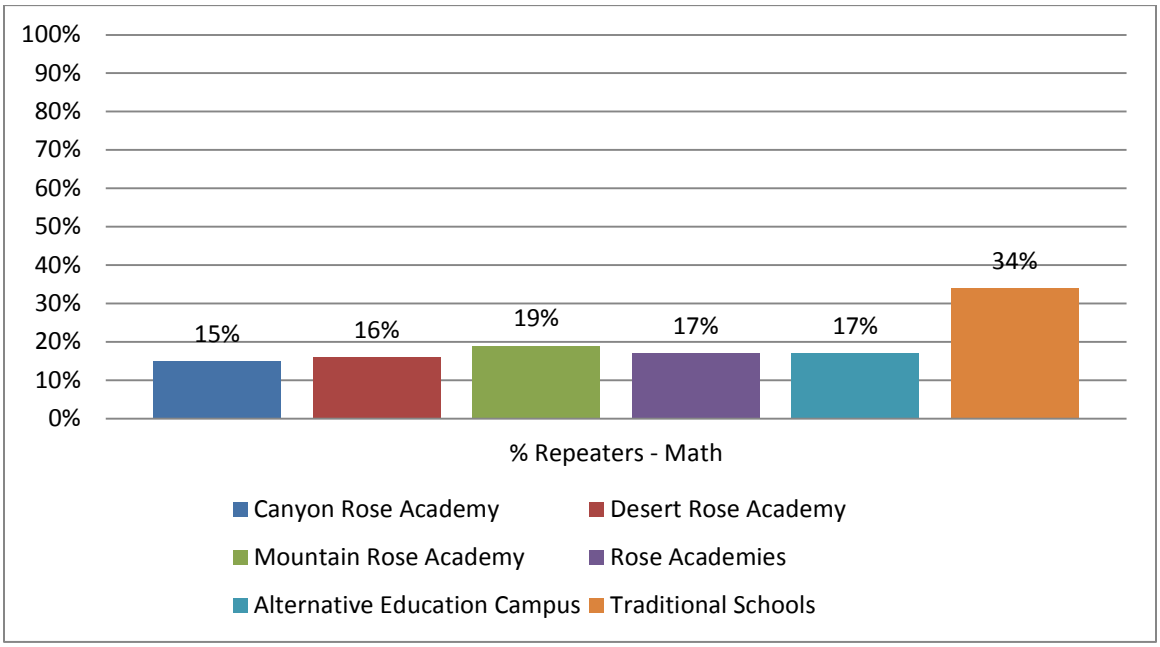
In May 2010, Rose contracted with the Arizona Charter School Association (ACSA) to produce a report, *Analysis of High School Effectiveness* (McConnell & Gau, 2010) in which earlier research about Building Charter School Quality was replicated. The ACSA report presented straightforward information about 2008-2009 AIMS pass rates at traditional high schools, alternative high schools, and Rose Academy high schools. Note Mountain Rose Academy as well as all Rose Academies met or exceeded the state average for alternative schools.

Figure P. Bar Graphs from June 2010 Analysis of High School Effectiveness

2008-2009 AIMS Math Pass Rates for 10th Graders



2008-2009 AIMS Math Pass Rates for Repeat Testers



It was important to look at repeaters because over 80% of our student population was in 11th grade or higher. (See Figure B).

See C.1 Interpretation for discussion of these charts.

Our work with ACSA helped provide additional insight into student performance at our alternative schools, so we weren't so extremely discouraged by AIMS results each year.

Model for Instructional Accountability

The MIA (Hurtado & Schlessman, 2010) was designed to provide Mountain Rose Academy with measurable objectives that informed the efforts of the school year. MIA objectives addressed coursework and standards, career transition, and citizenship. There were nine goals with fifteen measurable objectives. Mountain Rose Academy used this to guide curricular decisions and professional development programs. We analyzed data relating to the measurable objectives and presented at the end of the school year presented to ESP leadership an executive summary outlining the school plan, strategies used, results, and recommendations for the next school year.

We found the accountability categories of coursework and standards, career transition, and citizenship provided us with an organizing framework in which we could make a direct connection from our accountability model to how well we deliver our school mission.

The first MIA in 09 – 10 had eight goals with a total of eighteen measurable objectives. We found that having 18 MIA objectives was not easy for people to track. We wanted to narrow down the targets to three key elements – credit attainment, academic coaching, and graduation rates. We found we needed to target specific behaviors that lead to increased student proficiency reflected in AIMS results. RMG added a full-time data manager to allow for more accurate data analysis. The teaching team was responsible for analyzing data reports allowing teachers more time to target interventions.

We also directly tied the MIA to APAT performance and 301 performance criteria. A new evaluation framework (see section A.2 of this report) aided MIA efforts.

Figure Q: Evaluation Calculations Formula for Principals

APAT for Principals/Assistant Principals: DATA for Summative Evaluation #1

DATA TYPE	DATA INCLUDED	WEIGHTING
System Level Data	MIA Target 2.2	33%
Instructional Leadership	APAT Level 1-3 Indicators	67%
	Total	100%

APAT for Principals/Assistant Principals: DATA for Summative Evaluation #2

DATA TYPE	DATA INCLUDED	WEIGHTING
School Level Data	MIA Target 1.1, 2.1, 3.1	33%
System Level Data	MIA Target 2.2	17%
Instructional Leadership	APAT Level 1-3 Indicators	50%
	Total	100%

Percent Passing for Alternative Schools

In addition to the quadrant charts, we wanted to see how MRA compared with other Alternative Schools in terms of percent passing. Most alternative high schools share the problem of having a very small percentage of school population as 10th grade FAY students. There is currently no single source for data about alternative schools in Arizona. We gathered data from various sources including Building Charter School Quality research (Ernst, 2009), previous ASBCS renewal application executive summaries, and our own calculations that used the ADE alternative school list and ADE website reporting of AIMS scores. We produced our own table showing Academic Proficiency as Measured by the AIMS, Statewide and for Alternative Schools, and comparing MRA to those scores. Because we had to use various data sources, we fully understand that the same method for calculating data was not standard from source to source.

Table R: Academic Proficiency as Measured by AIMS Statewide, for AECs, and Mountain Rose Academy: Math & Reading Percent Passing by Academic Year

Group Tested		**Statewide**		**AEC**		**MRA**	
Year & Test		10th graders	"repeaters"	10th graders	"repeaters"	10th graders	"repeaters"
2008	Math	51%	30%	19%	14%	33%	27%
	Reading	76%	52%	33%	26%	58%	43%
2009	Math	70%	30%	29%	15%	45%	18%
	Reading	74%	43%	46%	26%	76%	32%
2010	Math	58%	18%	14%	8%	29%	9%
	Reading	77%	41%	45%	39%	63%	54%
2011	Math	60%	25%	19%	12%	22%	15%
	Reading	78%	43%	49%	30%	69%	47%
2012	Math	Public release of AIMS scores is August 1, 2012. Deadline for submission of this renewal application is July 20, 2012.					
	Reading						

See C.1 Interpretation for discussion of this chart.

C. 1 Interpretation including patterns, trends, strengths, weaknesses

NWEA MAP and decision to change to Galileo

Teachers found the NWEA MAP charts understandable. The weakness was we experienced a problem getting a pattern due to our highly mobile population because few students had multiple test scores to see a comparison from Fall to Spring testing and year-to-year. We tried adjusting the assessment dates, yet it didn't solve the problem.

We had email exchanges, dating back to 2007, and conversations with our NWEA rep asking about alignment for Arizona high schools. We kept being told "coming soon," or NWEA is working on it. We calculated our own correlation back in February 2008 because NWEA didn't provide high school information. MRA even purchased an upgraded package for SY 2009-10 including a growth calculator for teachers to use with students. We wanted to use the growth calculator to target more specifically the academic needs of individual students, however, we found out it was not available for high schools in Arizona.

We read research reports about using NWEA MAP with high school students. Scores for students in alternative schools are excluded from NWEA norming studies. Research suggests that growth projections for alternative school students are different than the ones published for traditional students (Ernst & Turnbull, 2010). We had a weakness in our choice of assessment systems.

We considered several alternative assessment systems. We had the Arizona Charter School Association come present their use of Acuity. Acuity high school assessments were still under development in spring 2011. We needed to make a decision for the SY 2011 – 2012 school year. We had Galileo present their assessment system. Galileo had existing assessments for high school. We made a decision to go with Galileo.

After a year of using Galileo, we are seeing the limitations of existing Galileo materials. Galileo is written for traditional students and for a traditional school calendar. The academic needs of Mountain Rose students are distinct. In Section D of this narrative, we link our data-based decision to our PMP and its action steps.

Reading Diagnosis Program

Implementing the Reading Diagnosis Program is a strength. The results of implementation are that MRA Reading AIMS scores are consistently acceptable, at the ASBCS Level of Adequate Academic Performance (LAAP) or approaching it. In fact, reading performance is particularly good when compared with other alternative schools. One ongoing challenge is to schedule reading specialist training for all teachers. When teachers move on, new teachers come to MRA. It takes time to educate all teachers with

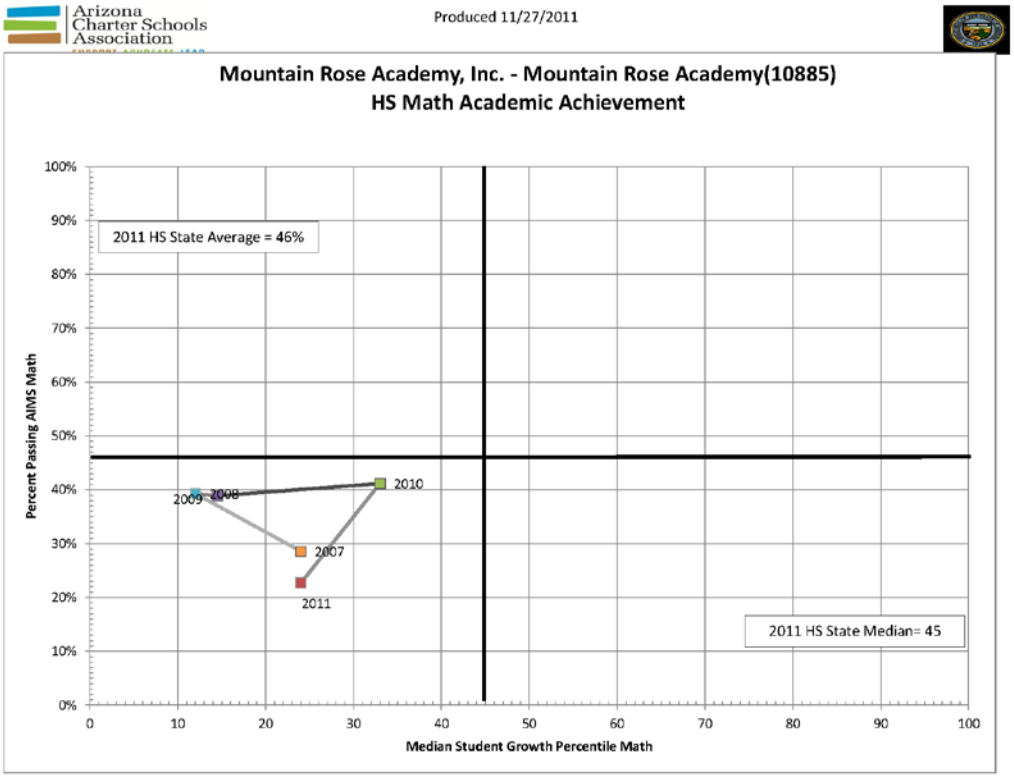
these reading specialist skills. Solid principal leadership is also needed, so the Professional Learning Community (PLC) benefits from this additional data.

Quadrant charts show that 10th grade FAY reading scores met or exceeded the LAAP for Spring 2009, Spring 2010, and Spring 2011. 10th grade FAY student percent passing the Math AIMS was very near the 2010 LAAP, http://www.asbcs.az.gov/userfiles/Level%20of%20Adequate%20Academic%20Performance%20Definition%20and%20Graph%20Example%2007_06_11(2).pdf, in 2008, 2009, and 2010; however, there was a drop in percent passing in 2011. Even though progress back toward the LAAP was seen in Spring 2012, percent passing is not at 2008 through 2010 levels.

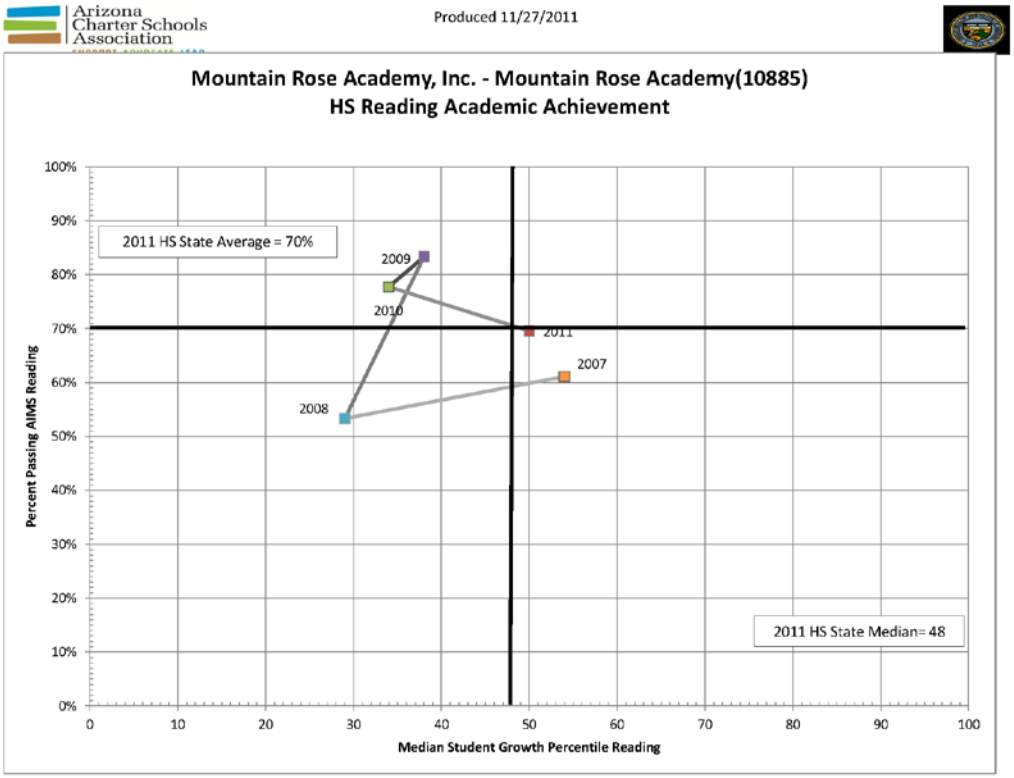
Lower percent passing explained below in the AIMS Percent Passing and Students with Special Needs.

Quadrant Charts showing AIMS results for 10th grade FAY students and Student Growth Percentile

Figure S. Quadrant Charts



Note: This chart is based on data obtained from the ADE in Oct. 2011. Proficiency and growth percentiles are only reported for FAY students.



Note: This chart is based on data obtained from the ADE in Oct. 2011. Proficiency and growth percentiles are only reported for FAY students.

School Leadership

The Superintendent terminated an MRA principal in the 11 – 12 school year because there were multiple indications over that leader's fourteen month tenure, documented in the principal's evaluations and personnel file, that R.O.S.E.® was not being well implemented. The impact of substandard leadership and resulting lack of R.O.S.E.® implementation can be seen in the Spring 11 and 12 AIMS scores, particularly Math. We were expecting scores, especially Math AIMS, to improve in Spring 12. Data shows some improvement, but the percentage passing Math AIMS should be better. MRA Math teachers, who were not implementing, as documented in performance data and evaluations, were also terminated.

Percent Passing AIMS for Alternative Schools

Based on analysis of the external research conducted as part of the Building Charter School Quality grant, ACSA's Analysis of High School Effectiveness, and data from the ADE website (shown in Figure Q), we are able to identify a strength of Mountain Rose Academy. Our percent passing the AIMS is consistently at, and frequently better than the, average for 10th grade testers and repeaters.

AIMS Percent Passing and Students with Special Needs

We looked at the special needs among our 10th grade FAY students since SY 2007-8. (See Figure C)

The year that there was a statewide drop in Math AIMS scores was Spring 2010. The HS AIMS Math was more rigorous that year because the 2008 Math Standard was reflected in the AIMS test. Despite this increased rigor in Spring 2010, our Math AIMS proficiency scores were slightly above the 40% statewide average. Our special needs population was about 10% of FAY students.

However in SY10-11, the percentage of special needs students at MRA increased for the 10th grade FAY student population. 23% of the 10th grade FAY population in 2010-11 had special needs. Again in 2011-12, our 10th grade FAY student population was 20%.

We are seeing a trend. When our special needs population is ≥ 20% of FAY students, it is more difficult to maintain a 40% passing rate. We address increased attention to students with special needs in our PMP.

C.2 Understandable charts and graphs

Much attention was given to ensure our internal charts and graphs were understandable regarding student achievement. Sometimes externally provided charts and graphs like the quadrant chart needed clarification. We supplemented those presentations with additional data. One example is the quadrant chart of academic achievement (see Figure X). To better understand the quadrant charts, we needed to know the group size, and the number of 10th grade FAY students as shown in Figure R. This additional data provides insight into a very small number of students being tested and used to make decisions.

Figure T. Number of 10th grade FAY students for Spring AIMS administrations, 2007 - 2012

Test	Math	Reading
Spring 2012	20	20
Spring 2011	20	20
Spring 2010	18	18
Spring 2009	47	43
Spring 2008	27	27
Spring 2007	36	38

D. Plan's Link to Findings

Data analysis was directly used to set the targets in our PMP and establish the action steps. Evidence from Reading AIMS scores indicates that if R.O.S.E.® curriculum is well implemented, student proficiency meets, or makes sufficient progress toward, the ASBCS LAAP. (See Table C.2). Math scores are a bit more problematic for all alternative schools. We have set challenging, yet achievable, action steps to reach our target. We want MRA to regain its performance as one of Arizona's top alternative schools, as reported by Kerry McConnell and Rebecca Gau in their *Analysis of High School Effectiveness* (June 2010).

Several action steps emphasize the importance of solid leadership at MRA. Other action steps are written to provide more timely feedback on implementation of the curriculum; monitoring teacher integration of Arizona's Common Core Standards; increasing timeliness when monitoring and documenting student proficiency, as well as adjustments to the assessment system for our alternative school setting; and the importance of professional development, linked to the first three strategies including evaluation of PD effectiveness.

Because Strategies and Action Steps are often the same for Reading & Math, we are submitting one PMP template. If an Action Step is Reading or Math specific, we have stated in the PMP.

Strategy 1: Provide and implement a curriculum that improves student achievement

Action Steps are written to focus on assuring a rigorous curriculum that integrates Arizona's Common Core Standards. A rigorous curriculum ensures high school academic achievement beyond the current state mandated test, which reflects skills only through 10th grade. Summer school programs specifically target students who are behind in pre-requisite skills. We hope that extra instructional time during the summer will allow students to recover content and develop reading and note-taking skills, so they are better prepared to do high school work.

Strategy 2: Monitoring Integration of Arizona's Common Core (Arizona Academic) Standards into Instruction

Action Steps reflect the emphasis throughout Arizona on transition to Arizona's Common Core Standards. We have beefed up our plan to monitor standard integration in instruction through more frequent observations, use of Intervention Plans, and weekly work by Curriculum Specialists with teachers and students in the school. Action Step #6 mentions annual revision of quantitative targets in teacher and principal evaluations.

Strategy 3: Monitoring and Documenting Student Proficiency

We found that any "out-of-the-box" additional assessment is not designed to meet the needs of our alternative education students and their educational setting. Several Action Steps in this Strategy reflect the adjustments we are making, in collaboration with ATI, on the Galileo system. We will also use the AZ Charter Schools Association's Excel Pivot Tables for enhanced data analysis. Our data analysis on special needs students led to Action Steps 6 & 7.

Strategy 4: Professional Development to Support Effective Implementation of Curriculum

Professional development is vital to implement the changes described in the first three Strategies. A PD Action Step is written for each of the Strategy 1 through 3 Action Steps that require implementation by instructional staff.

Timely and scheduled review of the effectiveness of these action steps will allow us to revise quickly if needed.

Offering quality education is always a process of continuous improvement. Based on data analysis from the past and using information about best practices, we have targeted Action Steps that will continue to improve academic achievement.

Selected References

Arizona State Board for Charter Schools, (n.d.) Arizona State Board for Charter Schools: Mission statement and strategic plan, retrieved from http://www.asbcs.az.gov/userfiles/Mission%20Statement%20and%20Goals%20-%20June%202011.pdf

Arizona State Board for Charter Schools, (n.d.) Board's Level of Adequate Academic Performance, retrieved from http://www.asbcs.az.gov/userfiles/Level%20of%20Adequate%20Academic%20Performance%20Definition%20and%20Graph%20Example%2007_06_11(2).pdf

Ernst, J. (2008, October). *Measuring success among alternative education charter high schools*. Presented at NACSA Annual Conference Indianapolis, Indiana.

Ernst, J. & Turnbull, J. (n.d.). *Alternative growth goals for students attending alternative education campuses: An analysis of NWEA MAP Assessment: Technical Report*. Retrieved from https://www.coloradoleague.org/uploaded-files/NWEA_AltGoals_TechRepo.pdf

Giovannone, C. (May 2010). A-F parallel model recommendations: Alternative schools model. Presentation to State Board of Education. Retrieved from http://www.azed.gov/state-board-education/files/2012/05/item-4d-a-f-model-recommendations.pdf

Arizona Department of Education Research & Evaluation. (June 6, 2012). Arizona's alternative A-F letter grade model. Retrieved from http://www.azed.gov/research-evaluation/files/2011/08/distributed_a-f-roadshow-pres_altschools_06-07-12_final5.pdf

Hurtado, K. & Schlessman, A. (2008). *Testing alignment at the Rose Academies: Correlation between MAP & AIMS scores, interpretation, and some recommendations*. Paper presented to Rose Governing Board.

Hurtado, K. & Schlessman, A. (2010). *Success at R.O.S.E.® alternative education high schools. Model for Instructional Accountability using student performance data*. Presentation at 2010 National Charter School Conference, Chicago, Illinois.

Hurtado, K. & Schlessman, A. (2010.) I'd rather read than play my Xbox. Retrieved from http://www.go2rose.com/pdf/IdRatherRead.pdf

McConnell, K. & R. Gau. (June 1, 2010). *Analysis of high school effectiveness: Comparison of 2008 – 2009 AIMS pass rates for students attending traditional high schools, alternative high schools, and the Rose Academy Charter Schools*. Phoenix, AZ: Arizona Charter Schools Association

Rose Management Group, (2006). *The Administrative Professional Tool: APAT for teachers – teacher version.*

Rose Management Group. (2008*). R.O.S.E.™ evaluation of student achievement: Rationale, processes, and illustrative data samples.*

Rose Management Group. (2009). *ROSE Teacher Education Program (ROSE TEC): R.O.S.E. ® components as teaching methodology*.

Silvaroli, N. & Wheelock, W. (2004.) *Classroom reading inventory*, 10th edition. New York: McGraw-Hill.