Introduction

The STAR School is a small rural school located on the edge of the Navajo Nation, about 20 30 miles east of Flagstaff and the San Francisco Peaks. Since the 1800's this area of pinion/juniper forest that borders the high desert, has been an interface between Navajos, Hopis and Anglos. The larger area is part of the Colorado Plateau, which extends not only across the Navajo Nation to the north and east but also to the west including the Grand Canyon. It is an area of incredible cultural, botanical, and geographic diversity and awesome beauty. This is our place. The STAR School's location is purposeful, so it is part of our core values to honor this place, the people, the plants, and the animals that live here, as well as the cultures that have grown out of this land.

Woven into the curriculum are lessons in the uses of native plants, the local knowledge of how to successfully farm and ranch, and lessons on the local history all integrated to math, language arts, science and social studies. Our students are academically engaged in advancing that knowledge and sharing it with the community.

STAR students participate in service learning activities that honor the school's focus on relationship; which come from the Dine' cultural concept of K'e'. Ke'e' emphasizes the importance of Respect, Responsibility, Reasoning and Relationship. These four aspects of character, that we call the 4 Rs, are the basis of how we expect students and staff at the STAR School to relate to one another. The 4Rs can be evidenced in the positive and forward thinking attitudes of students and staff, the care shown for out place and the environment, the thought put into student projects and school work and character of our graduates.

Since our first graduating class in 2005, STAR School has graduated 84 students from 8th grade. Of the students who graduated between 2005 and 2009 38 out of 43 students (88%) either graduated from high school or received their GED. This compares with a 53.4% overall graduation rate for Native Americans in Arizona. ** Of those 38 students, 27 (71%) enrolled in a college or university. This compares to only 0.6% of Native American/Alaskan Native students who go on to college nationwide. Six of those students received scholarships; two of those were Gates Millennium Scholarships that will pay for their education through to their doctoral programs. Of the 10 students who did not go on to college, one enlisted in the Marines, several others are employed in the community and one is deceased. Although these former students are graduating from a variety of high schools that are not connected to STAR, the dramatic difference in graduation rates speaks to our successfully preparing our students to further their education.

We are honored and pleased to present our Academic Progress report, recognizing that we at STAR School do not want to graduate students who, like punched out parts on an assembly line, can pass a standardized test and nothing else. We do much better to recognize that students are individuals with unique talents and abilities. These abilities may not, in some cases measure up to a standard for reading or math that has been set by outside forces. We started earlier than many schools to adapt our lessons and curricula to the Common Core Standards and have at the same time contextualized those standards towards our student's culture and background. We work diligently within the framework of our vision and philosophy to prepare our students for the outside world, furthering their education and the demands that entails. We believe that our emphasis on Character education through respect, responsibility, relationships, reasoning (our 4-R's) supports

our students in lifelong learning. We know the future belongs to the educated and at STAR focus academic content to the whole child.

*June 2013, Education Week annual report "Diplomas Count 2013"

** National Indian Education Association: http://www.niea.org/Research/Statistics.aspx) .

Academic Performance

Student Progress over Time (Growth)

The STAR School Curriculum is designed, implemented and constantly improved by the individual classroom teachers, with the input and approval of the STAR School administration, consultants and educational specialists. Specifically, the Curriculum maps are collected and reviewed by the Federal and State Programs manager who also serves as assessment coordinator. The Curriculum and weekly lesson plans are reviewed by the Director of Teacher Happiness and Student Accomplishment, who is also directly responsible for teacher observation and evaluation. Teacher Evaluations are based on the *Arizona Framework for Measuring Educator Effectiveness*. He observes the teachers in their teaching environment, meets with them on a regular basis, and provides feedback on their lessons, teaching methods and professional development plans.

All Curriculum maps are reviewed to assure that they are aligned to the Arizona Common Core Standards. The teachers received training and guidance in implementing the common core standards during the 2011-2012 school year and we achieved full implementation of the Common Core Standards in our Curriculum during the 2012-2013 School year.

Reading

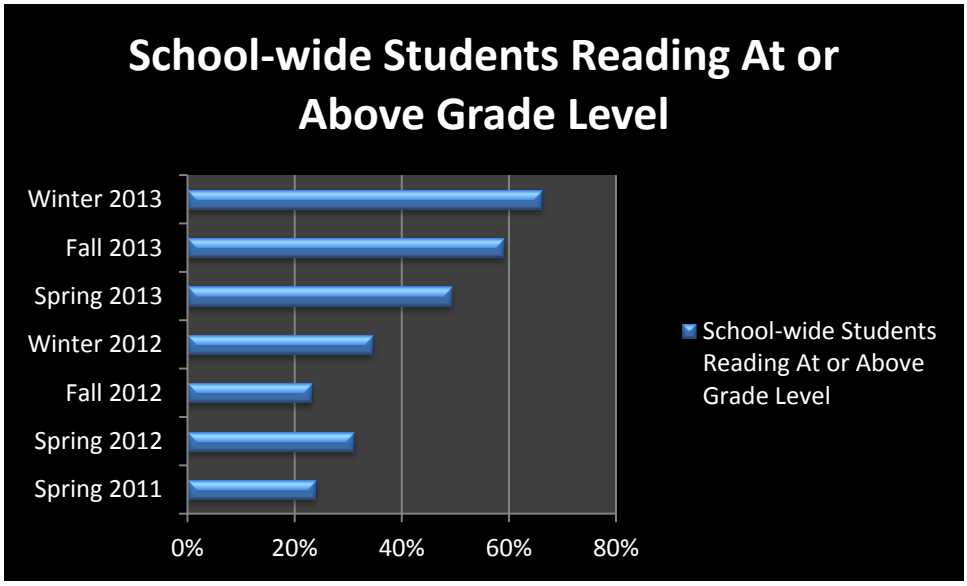
The materials and methods used in the classroom, although varied across grade levels, include common elements to provide consistency across grade levels. Our Core reading program, Used across all grade levels, is the VOICES Reading Program published by Zaner-Bloser. This program was evaluated by representatives from the State of Arizona in 2007 and found to be qualified as a Core Reading Program for our school. *Voices Reading Program* is aligned with the Common Core Standards for Reading and Language Arts.

The Voices Reading Program focuses on comprehensive literacy instruction using leveled, multicultural trade books. The program allows for differentiated instruction with engaging content. The systematic approach used by voices incorporates instruction in specific skills (reading, writing, speaking, listening) aligned to relevant strategie s reflecting on six character development themes. For instance, lessons begin with central questions giving the students contextualization to read for in guiding comprehension. Also, core vocabulary that will be used in the text is reviewed and studied during the unit, aligned to SIOP lesson formats. The program also includes phonemic awareness, phonics skills and word study lessons. The program is easily adaptable to students who are reading lower grade levels and provides reading material within the same themes for those students to work with in closing their achievement gap. The Voices Reading program is aligned to the common core standards.

Our formative assessment for reading and literacy is done primarily through the *Voices Reading Assessment*, which assesses phonics, fluency and comprehension skills. Teachers are always assessing students through student products of concrete, student generated creations that reflect the knowledge, skills and standards students have attained. STAR student performances and demonstrations (actually doing) the skills being assessed are a valid form of formative assessment along with the use of teachers creating formal rubrics and checklists with clearly stated criteria aligned to standards. We believe in old fashioned anecdotal observations where informal observations are recorded sharing student performance.

Additional Literacy progress is monitored through the use of *Words Their Way, Word Study for Phonics, Vocabulary and Spelling Instruction*. Both *VOICES* assessment and Words Their Way are being used in Grades One through Eight. Our third and fourth grade classroom has been using Florida Center for Reading Research materials to track student growth in phonemic awareness, fluency, vocabulary development and comprehension. This additional assessment reflects the teacher's integration of the Florida Center materials into her centers based curriculum. *Words Their Way* assesses using a Spelling Inventory, which tracks progress in phonemic awareness and vocabulary development. Florida Center materials include a Performance Record tracking form which tracks progress in each of the four areas mentioned above. Both programs produce additional growth data to compare with and supplement knowledge of the students' progress and growth in literacy skills. In past years, the school relied on the *AIMS-Web Reading Assessment*. We decided as a school to discontinue the use of this assessment because it did not give us an accurate measure of student's comprehension skills. However, because Pearson did correlate the Aims-web Reading Curriculum Based Measure raw scores with Lexile measures, in a 2011 study, we can compare Aims-Web Raw scores with the lexile and grade level scores obtained from the Voices Reading Assessment. The Voices Reading Program assigns students to the A through Z Levels developed by Fountas and Pinnell and used in their Guided Reading Program. These Levels are aligned to Lexile levels, which were themselves aligned to grade level data in a separate research study by Advantage Learning Systems Inc.

The student growth data taken from the Aims-web and Voices Reading assessments from Spring assessments of 2011 through winter assessment of 2013 can be seen below.



What have we done to improve our reading instruction at the STAR School? We believe that our reading program improved when we started to focus on encouraging reading in the homes of our students and on further professional development of our teachers. Our first efforts in this area was to begin a back-pack program, where family activities, including books to be read and literacy activities, were sent home with selected students each week. The back-packs were circulated through the entire student community in turn. Professional development of our teachers concentrated on literacy across the curriculum and including writing and presenting activities in our lessons in science and social studies. All students were required to participate in writing and presenting Freedom and Democracy Speeches. These speeches were contextualized to the student by being paired with service learning projects in the community. Reading, writing and presenting activities were given meaningful purpose through this active use of the literacy skills.

More recently, through our professional development activities with Dr. Sigmund Boloz, of Northern Arizona University, we have strengthened this approach of including writing in our literacy programs. Teachers have increased the journaling and writing of stories in their classrooms. This has increased the student incidents of using and working with words to create; consequently, they are more successful at reading.

During the 2013-2014 School year, the STAR School, through a new Language and Literacy Project, funded through the U.S. Department of Education, began distributing books and e-books to every student from first through eighth grade. The school purchased Kindle e-readers for each student to read the e-books and signed agreements with the parents so that the students could take these Kindles to and from school with them. Every student will receive at least 10 books from the grant each year, as well as a collection of e-books on their Kindle readers. It is our intention to increase the amount of reading that each child does by providing books at each student's independent reading level. Students are included in the choice of books so that each child reads about what interests them. Book fairs are provided once a week so that books can be ordered and passed out to students. This program has created a lot of excitement among the students about the books. The program will be continuing over five years.

STAR School's partnership with the College of Education at Northern Arizona University included teacher candidates assessing STAR student independent reading levels followed by giving appropriate leveled books to every student at STAR School. Approximately 2,000 books have been given to children to take home as a result of this partnership.

Math from Kindergarten through 4th Grade (Growth)

Core Mathematics Curriculum are varied across grade levels, but generally are as follows: Grades K through 4 uses Montessori Math Materials as their core mathematics curriculum with supplemental materials in use. Montessori Math curriculum has been aligned with the common core math standards. Grades 4 through 8 use a variety of texts, materials and resources in comprehensive curriculums that specifically address the common core standards in mathematics.

The STAR School's original decision to adopt a Montessori math curriculum in Kindergarten through 4th grade was based on success at the pre-school level that is supported by testing data gathered from a four year grant that supported our Early Learning Center Program at STAR School. In the four years of monitored by our program evaluator, the proportion of students who scored at or near Kindergarten Math levels on the

Woodcock Johnson II math concepts subscales improved with each cohort of children. 38% of those Children who finished pre-school in 2010 were at this level. 95% of those who finished pre-school in 2013 were at the Kindergarten level. With this success in mind, we wrote our 3 to 3rd Project which implements Montessori Math for children entering pre-school at age three through the third grade. It is our plan to improve math scores in the same way that we have improved our reading scores, by adhering to researched based philosophy that math instruction begins with concrete, hands on instruction and only gradually moves towards an abstract, but firmly grounded, understanding of mathematical concepts.

Our Kindergarten is a part of our Montessori Early Learning Center, or Alchina Bighan (Children's House in the Navajo Language). The math curriculum in this classroom is Montessori and uses Montessori Math materials. To assure that the common core standards are addressed, the teachers in this classroom have aligned their curriculum to the common core standards. Tracking of student progress is individual and uses the tracking forms used in many Montessori classrooms.

In the STAR School 1st and 2nd grade classroom, learning in the math area involves students work with concrete educational materials that graphically show what is taking place in given mathematical process. Our students use hands-on learning materials that make abstract concepts more concrete. They can literally see and explore what is going on in each mathematical process. This approach to teaching mathematics offers a clear and logical strategy for helping student understand and develop a sound foundation in mathematics and geometry. The Montessori Math curriculum is based on the European tradition of Unified Math. Unified Math introduces Elementary students to the study of the fundamentals of algebra, geometry, logic, and statistics along with the principles of arithmetic. The concrete Montessori Math materials are perhaps the best known elements of Dr. Montessori's work. The materials proceed through several levels of abstraction, beginning with basic foundational math skills presented in concrete ways and working up through advanced and secondary math.

The Montessori math curriculum is used by the teacher in 3rd and 4th grade to move the students from a concrete understanding of the math standards to an abstract understanding, which is required under the common core standards. Math centers in the 3rd and 4th grade are not only based around Montessori materials, but are also based on supplemental materials based on Buckle Down Math, Math Minutes and collaborative group work to solve word problems using critical thinking skills. As in other classrooms, math is taught across the curriculum as evidenced by teaching of art with a strong geometry focus and student's being required to calculate the time that they were out of the classroom on the bathroom sign out sheet.

Math 5th through 8th Grade (Growth)

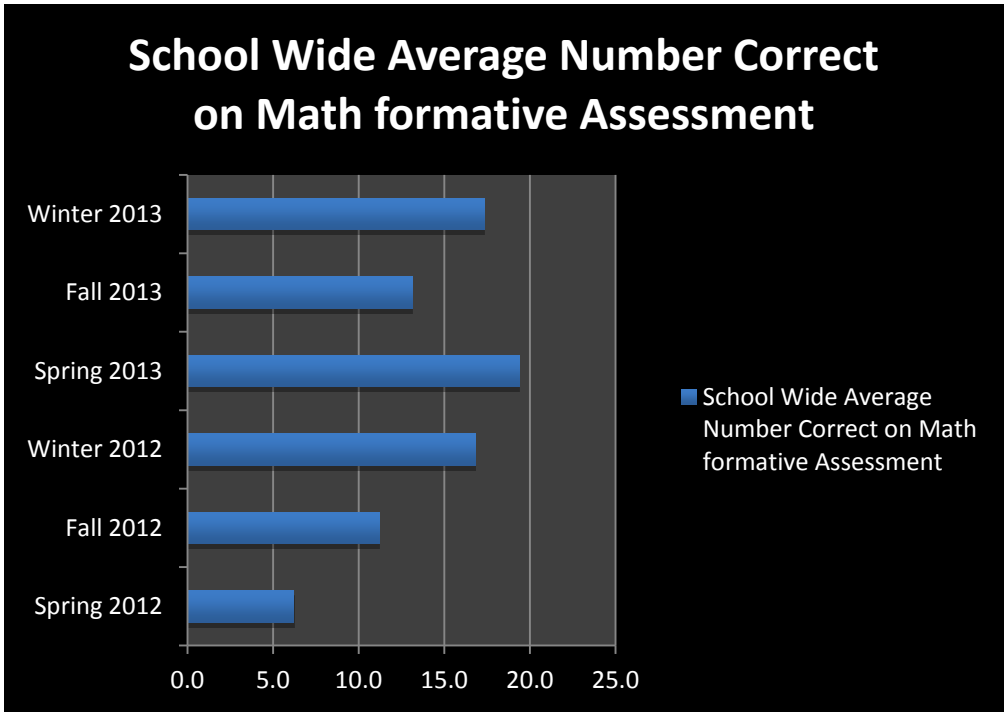
In grades 5th through 8th the math curriculum does not involve Montessori methods and materials, but extends the methodology of hands on materials and the philosophy of student choice centers based approaches that use rotations and allow the teacher to pull aside groups for individual instruction. Each classroom has selected a textbook as a resource, but the intention is to get away from the textbook as the center of instruction. The curriculum focuses on independent math work, developing fluency, and expressing mathematical ideas. Math is embedded throughout the curriculum, especially in art and science activities. The curriculum teaches vocabulary specific to mathematics, allows for differentiated instruction with students who need additional help or have disabilities. Teachers use math data to inform differentiated instruction.

Additionally, our STAR School teachers have received professional development Dr. Gay Johnson, Professor of Mathematics in the Education Department at Northern Arizona University. On two separate occasions, Dr. Johnson presented workshops where the teachers were taught and practiced specific methodologies on incorporating hands on activities in teaching mathematics concepts in the classroom. The teachers were observed and monitored for incorporating these methods into their classrooms. Furthermore, in the 2013-14 school year, teacher candidates under the instruction of Dr. Gay Johnson are teaching STAR School students on ten Fridays during the school year, implementing the same math instructional goals the STAR teachers received.

At the beginning of the 2013-2014 school years the teachers from pre-school through 8th grade took two professional development days where they were guided in creating a mathematics curriculum map aligned to the Common Core Standards. **Our 7th and 8th grade teacher is working to obtain his National Board Certification in Math, concentrating on early adolescent mathematics (6th -10th grades).** This advanced professional development requires evidence of improvement in his student's math scores.

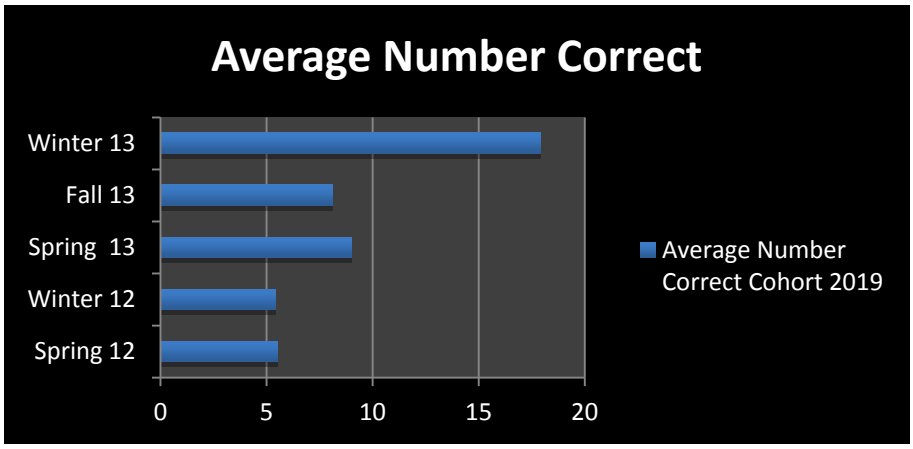
In addition to the professional development, supplemental materials have been incorporated into our mathematics instruction. Gizmos, an online math program recommended for preparing students for the mathematics to be presented on the upcoming PARCC assessment, prepares students on math based on the common core standards. Khan Academy videos, from Kahnacademy.com, are used both for classroom demonstration of concepts and for video review of concepts to assure student understanding. IXL.com memberships have been purchased by teachers in the 3rd, 4th and 5th, 6th grade classrooms. This online resource provides additional practice in math concepts being taught.

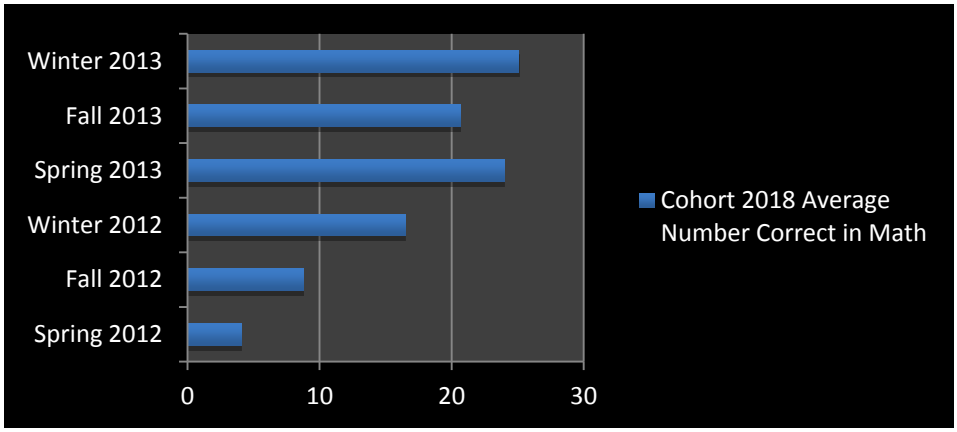
Our formative assessment for all grades 1st through 8th is Aims-web. The chart below shows the growth data for the whole school from 2012 and 2013.



What are we doing to improve our mathematics instruction at the STAR School?

Our extension of the Montessori math curriculum from Pre-school and Kindergarten into the 1st through 4th grades is a major push to improve our mathematics scores. Teachers in these classrooms have certificates showing they completed training in use of these materials through the North American Montessori Center. The growth trends on our youngest cohorts both cohort 2018 and cohort 2019, where the majority of the students have encountered Montessori math from the beginning, is some evidence that this is a successful approach.

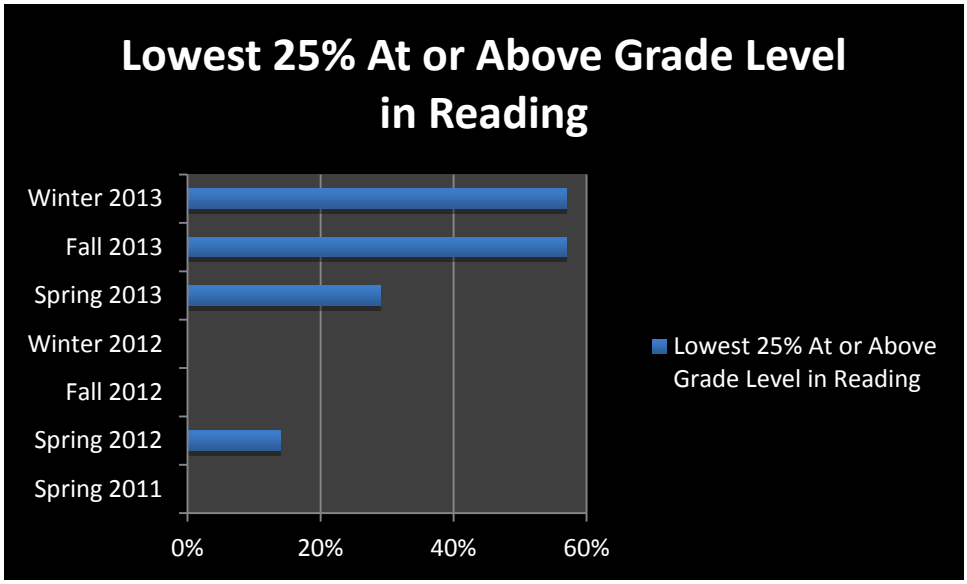




Reading and the Lowest 25%

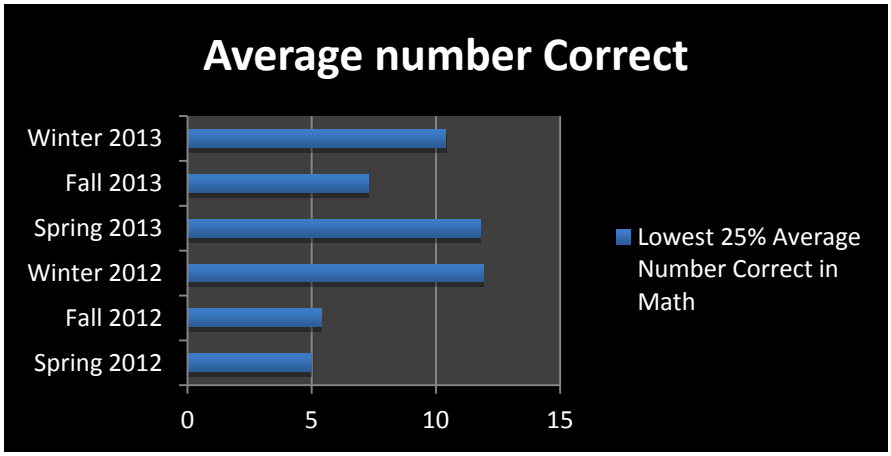
An intervention program was implemented to address those students who are in the lowest 25% performance in the school on the State of Arizona Standardized test, AIMS. The intent of the intervention program was to provide additional individualized and small group instruction in reading to our students who were identified as the lowest 25% in reading. This intervention has been carried out by different individuals over the three years that it has been in place. In both 2011 and 2012, we relied on pulling these individuals out for reading groups, and we had only one interventionist during these years. As the formative assessment data shows, this had little effect on their scores until the spring of 2013, when there was some growth.

During the 2013-2014 school year, our approach has been to put multiple interventionists into the classrooms and provide the individualized and small group instruction within the context of the classrooms reading time. These interventionist have been highly qualified certified classroom teachers. This has been more effective in influencing performance on the formative assessment scores for these individuals. Interventionist work with identified students and increase the individualized time and differentiated instruction during the classes reading instruction time. As can be seen in the data, there has been an increase from 29% to 57% of these students reading at or above grade level. This is reflected in the Charter Boards Academic Performance report as exceeding the standards. Our data reflects even more progress with this group after the report was published.



Math and the Lowest 25%

For our lowest 25% in math, the average math scores on formative assessments have increased by 50% from spring 0f 2012 to the winter of 2013. 57% of our lowest 25% showed consistent growth over that period. **100% of all students in our lowest 25% are scoring higher in winter 2013 than they were in the spring of 2012**.



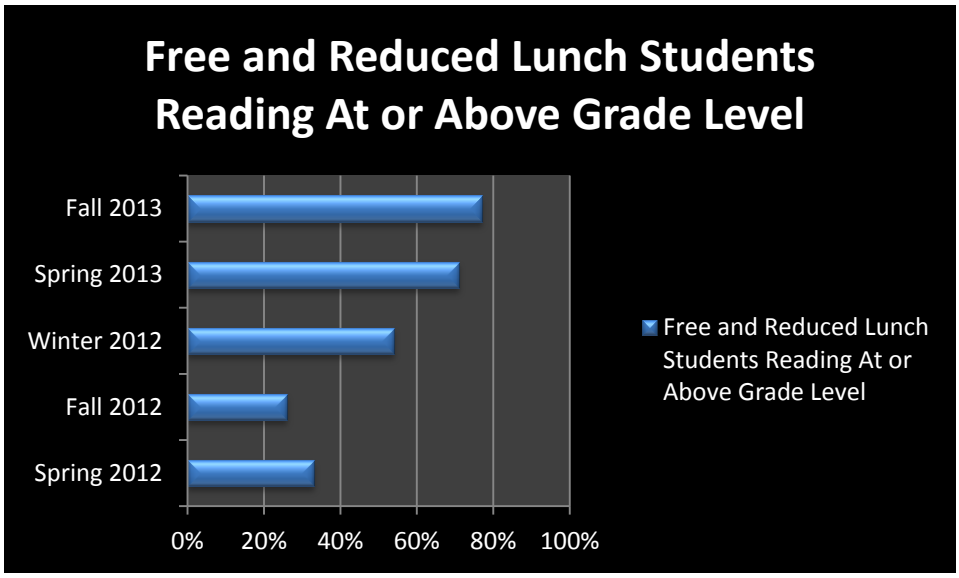
Intervention with the lowest 25% in mathematics has been carried out by dedicated certified teaching staff that goes into the classrooms during the math classes and work with these students on an individual and small group basis. The materials used in this intervention are differentiated towards the individual student's needs, and assessments are looked at closely to determine the particular areas where each student needs to improve. Interventionists keep data on the number of times they work with each student and the specific skills that were covered in each session.

Reading and Students Who Receive a Free or Reduced Lunch

The STAR School's director and co-founder, Dr. Mark Sorensen has been administrator of Navajo community schools for over 20 years and is experienced in Native American Education in high poverty areas. He has provided consistent professional development and guidance, creating a community of educators and leaders for our high poverty students in this very rural environment. STAR School serves a Native American population, the majority of which come from the Navajo Reservation. 80% of our students come from a background of extreme poverty, and therefore qualify to receive a free or reduced lunch. The students are served healthy balanced lunches from our certified food service program. Our food service coordinates with the school's Farm to School project to put fresh vegetables and fruit on the plates. We follow the latest Nutrition guidelines published in the Federal My Plate program. This program encourages children to be involved in growing of their own food, and our students are very involved in planting and harvesting food from the farms involved in the Farm to School project and also in planting and growing in the gardens and greenhouses on the school's campus. Academic content is integrated throughout the Farm to School project. Teachers have received a wealth of material and professional development for integrating gardening content to academic standards. The success of our Food Service Program helped us in obtaining another competitive grant through Navajo Approaches to School Heath. This grant helped us to expand our efforts though developing a physical education program for the students and to educate and train our staff, students and community members in diabetes prevention. ADE School Nutrition Program has commended STAR School's food service for their outstanding breakfast and lunch program.

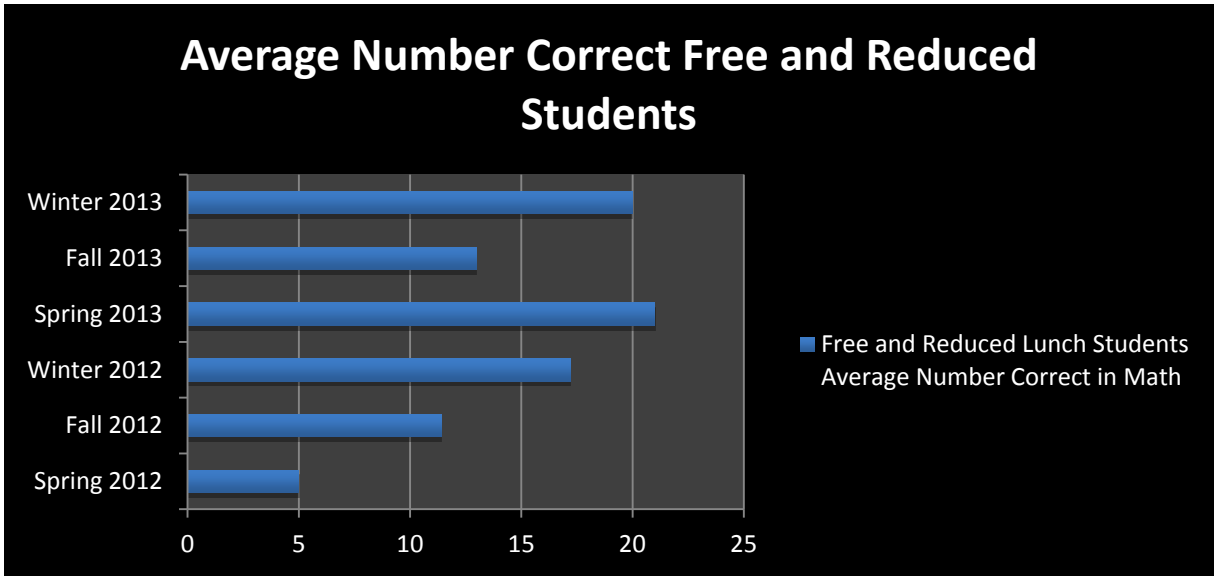
The formative assessment growth data for our Free and Reduced lunch population shows a 44% increase in the number of these students who are reading at or above grade level between spring 2012 and winter 2013.

Formative Assessment Data for Free and Reduced Lunch Students



Math and Students who receive a Free and Reduced Lunch

Students receiving free and reduced lunches mirror the overall school population for scores on the formative math assessment, only the scores for this group are slightly higher. The scores have increased from an average of 5 correct in spring 2006 to an average of 20 correct In Winter 2013. The average number of questions on the math probes is 30. With this in mind we are looking at an increase of 16% to 66%.



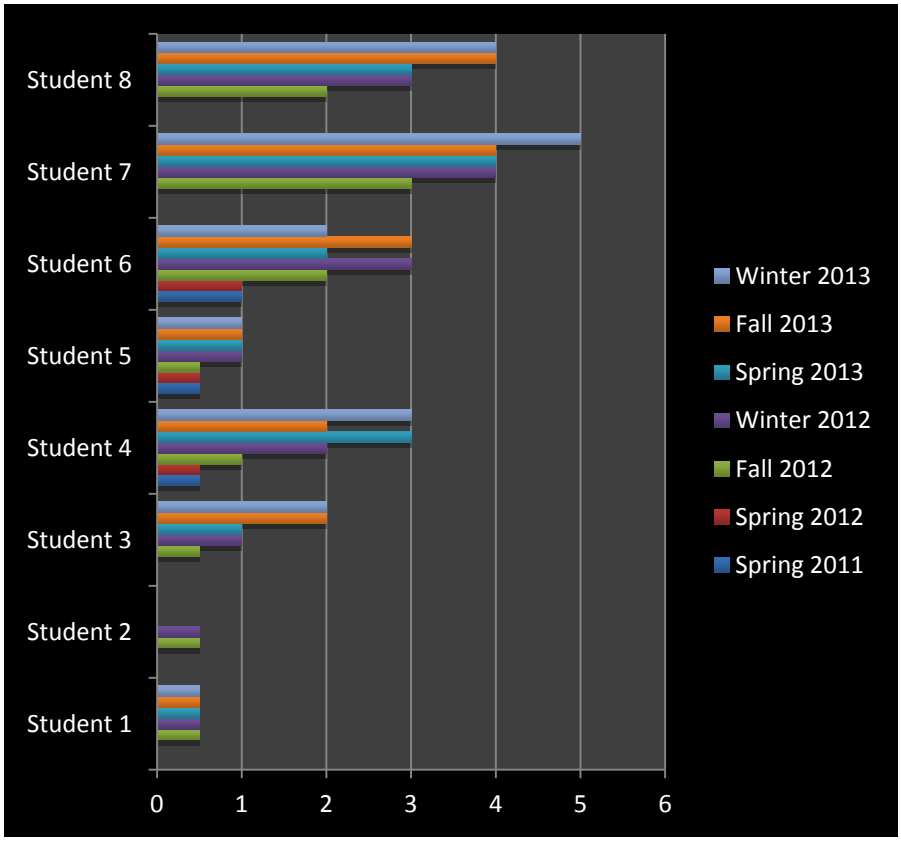
Reading and Disabled Students

Our special education population is made up of students who have learning disabilities in the areas of math and reading. 36% of those students have a specific learning disability in the area of reading. Our special education staff consists of one special education teacher and a part time aide who work under the inclusion model with those students who receive special education services.

Our special education teacher provides individualized instruction to each student according to the requirements of their individual education plans. Our special education population represents students from the 2nd through 8th grades. Although none of these students is reading at grade level, this data demonstrates that 75% of these students have advanced one or more grade levels in their reading. Three students have advanced three grade levels in their reading in the period from spring 2011 to winter 2013. One student has advance 2 grade levels in reading and two others have advanced one grade level.

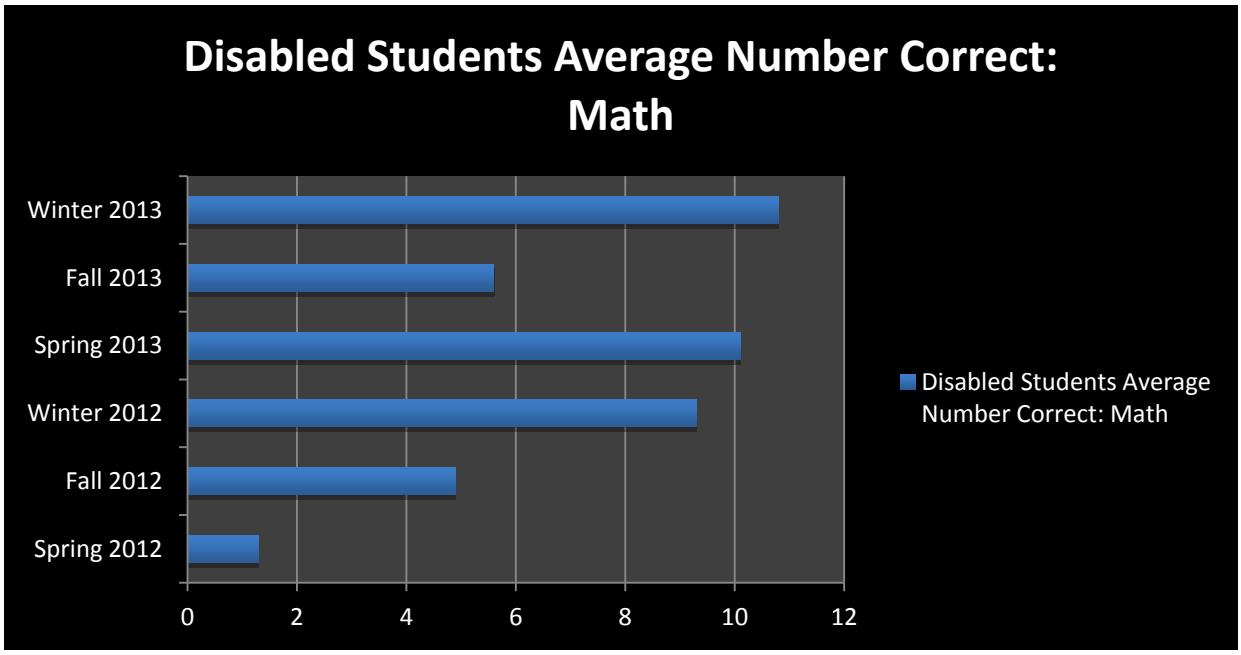
The curriculum followed by the special education teacher follows that designed by the classroom teacher with accommodations and modifications made in the amount and reading level of the work that the students accomplish. Additional assessments, such as the Jerry Johns Reading Inventory are used by the special education teacher to monitor the students 'progress. Goals for the special education students focus on reading fluency, vocabulary development and comprehension at their individual developmental levels. Goals are measurable and progress reports are written and included in their special education reports.

Reading growth data for disabled students



Math growth data for disabled students

45% of our special education students have a Specific Learning Disability in the area of Math. Our special education teacher provides individualized instruction to each student according to the requirements of their individual education plans. Our special education population represents students from the 2nd through 6th grades. Using an inclusion model, our special education teacher works with these students on individualized goals through their Individual education plans. The average number of correct answers on our formative math probes has increased for these students from 1.3 correct in spring 2012 to 10.8 correct in Winter 2012.

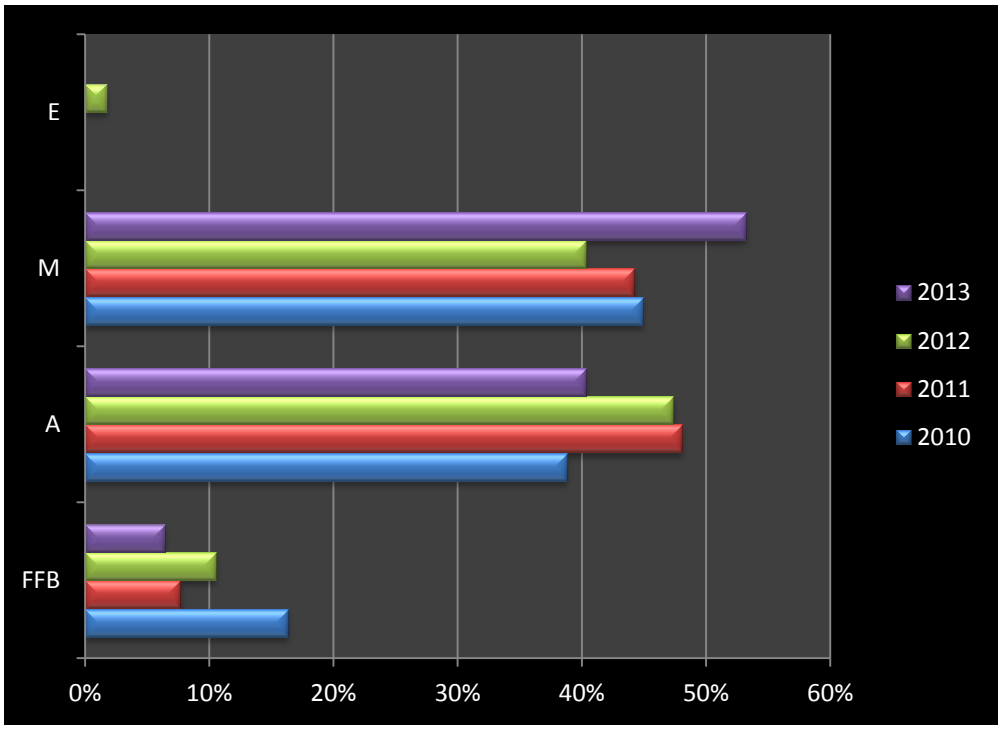


Student Achievement (Proficiency)

Proficiency in Reading

The overall percentage of students who fall far below in the reading portion of the AIMS test has fallen from 16% in 2010 to only 6% in 2013. The overall percentage of students who meet or exceed on the reading section of the AIMS had risen from 45% in 2013 to 53% in 2013. We fully expect our reading scores on the AIMS to continue to improve. With the introduction of the literacy grant that provides a number of independent reading level books to our students, the reading intervention with our lowest 25% and those students who show any indication of needing additional help, and our NAU-STAR School Partnership the students receive an increased focus on the importance of reading and development of reading skills.

Aims Data for Reading



The school opened its first library during the 2013-2014 school year. Our literacy grant is providing funds to put books on the shelf of this library. The library provides both fiction and non-fiction material, and this year's focus, to meet the demands of the common core standards, has been on increasing the number on informational text in the library and available to our student population. The Library currently has over 3000 texts available for students and their families to borrow.

The STAR School provides monthly parent meetings that have been well attended. During these meetings , the parents have been educated on how to use their student's Kindle e-readers and encouraged to read with their students at home. Permission to take the Kindle home was contingent upon the parents attending one of these trainings, where they signed a Kindle agreement outlining the care and responsibility for the Kindle.

Those students who received a score on the 2013 AIMS Reading section that was Falls Far Below are also receiving additional instruction from our intervention team. Along with our lowest 25% in reading, any student who fell far below in reading is also included in small group and individual reading intervention.

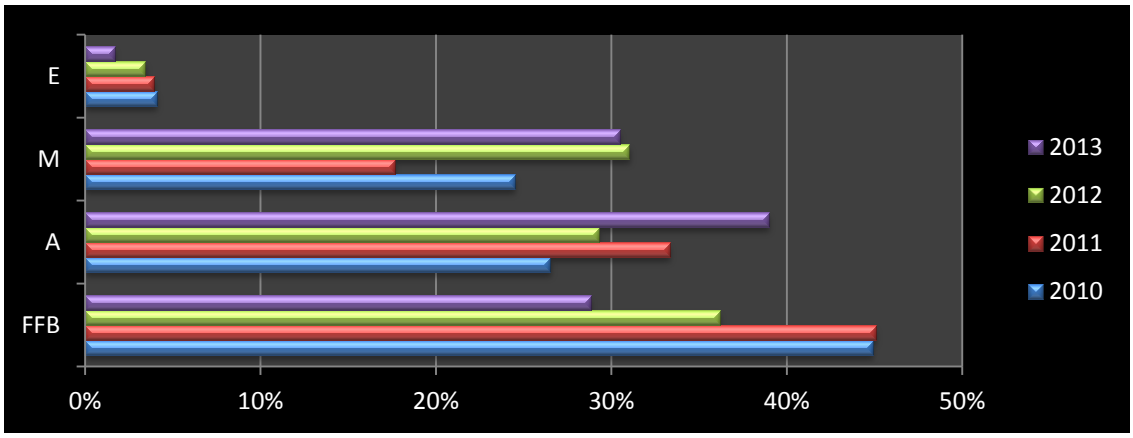
Our NAU Partnership has been a great help in giving our students additional reading time and reading instruction. During the year, students from NAU have been in the classrooms reading with and to the students. On our Friday visits to the NAU campus, students under the tutelage of Dr. Sigmund Boloz and using methods that he teaches have presented additional reading lessons to STAR School students.

As mentioned earlier, the teaching staff attended professional development with Dr. Boloz during October and November of 2012. During these workshops, the teachers learned how to use the Words Their Way materials that they have been implementing in their classroom for ongoing instruction and assessment in reading fluency, phonics and comprehension. This is in addition to our core VOICES reading program and assessments that accompany that program.

Proficiency in Math

The overall percentage of students who fall far below on the math portion of the AIMS test has fallen from 45% in 2010 to 29% in 2013. The overall percentage of students who meet or exceed on the math portion of the AIMS has risen slightly from 28% in 2010 to 32% in 2013. These data indicate that we are increasing the number of students who meet or exceed while dramatically decreasing the number of students who fall far below the standards. The trend is in the right direction, and we fully expect, that just as we have been able to improve the reading scores on our students we will also be able to improve their math scores. As mentioned in SGP section on math, our Montessori math program coupled with the training that we have had in hands on math instruction will go a long way to improving the math scores in cohorts that have had the full advantage of Montessori math from the beginning. In addition our supplemental materials such as Gizmos, IXL math, Khan academy review (all discussed in the previous math section) will help improve the math scores even among our older students who did not have the Montessori foundations.

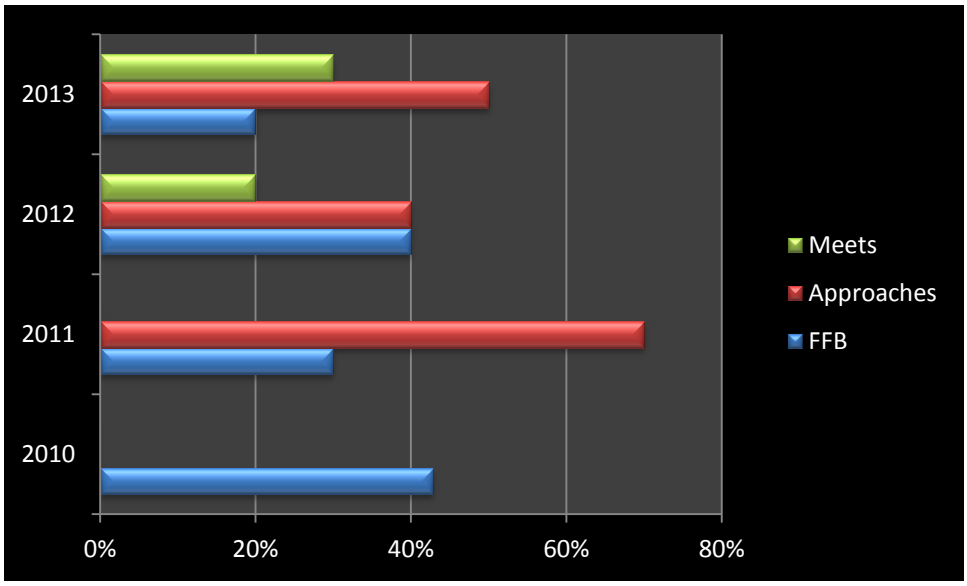
Aims Data in Math



Reading Proficiency and the Lowest 25%

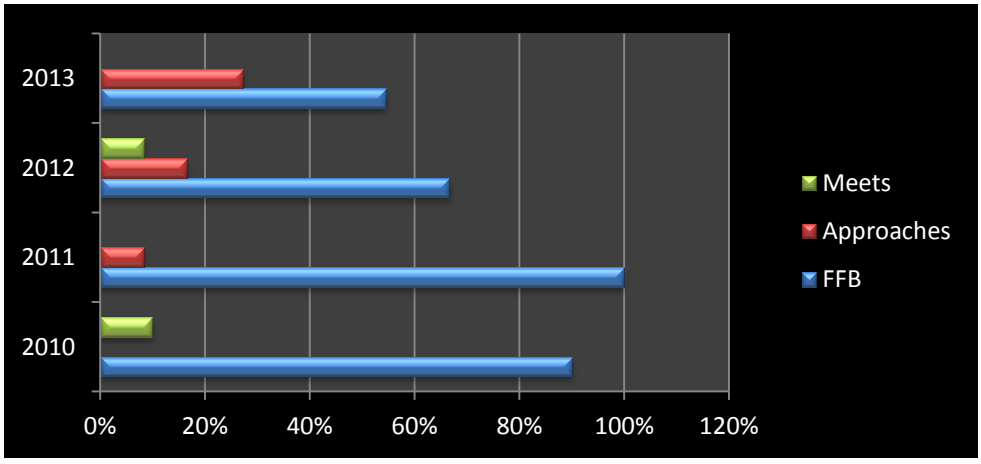
On the AIMS Reading section for 2013 only 20% of our students who are identified as the lowest 25% in math fell far below in reading. In 2013, 43% of these students who fell far below in reading and none of these students met on the reading standards. In 2013 30% of these students met the reading standards and more of them approached the standards.

Lowest 25% AIMS Reading Data



Math Proficiency and the Lowest 25%

The percentage of students who are identified as our lowest 25%, that fall far below on the math section of the AIMS dropped from 90% and 100% in 2010 and 2011 to 55% in 2013. The percent of these students who meet or exceed on the math section of the AIMS has not been consistent. In 2010 10% met or exceeded. In 2012 8% met or exceeded.



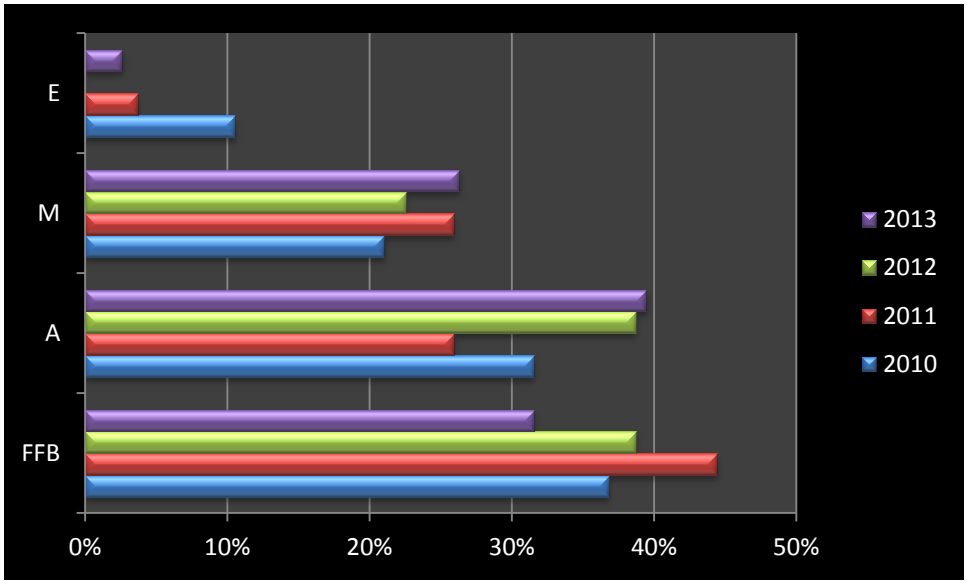
It is our plan that continued intervention with the students that fall in the lowest 25% will improve performance in future years. The strong foundations that we are providing through the Montessori program will also strongly affect the performance of this group of students.

Reading Proficiency for Free and Reduced Lunch Students

Between 2010 and 2012 there was a 12% increase in the number of free and reduced lunch students who met or exceeded in reading. During the same period there was a 5% drop in the number of free and reduced lunch

students who fell far below in reading. It is also significant that there was a 7% increase in the number of free and reduced lunch students who approached in reading, reflecting the 5% that no longer fall far below.

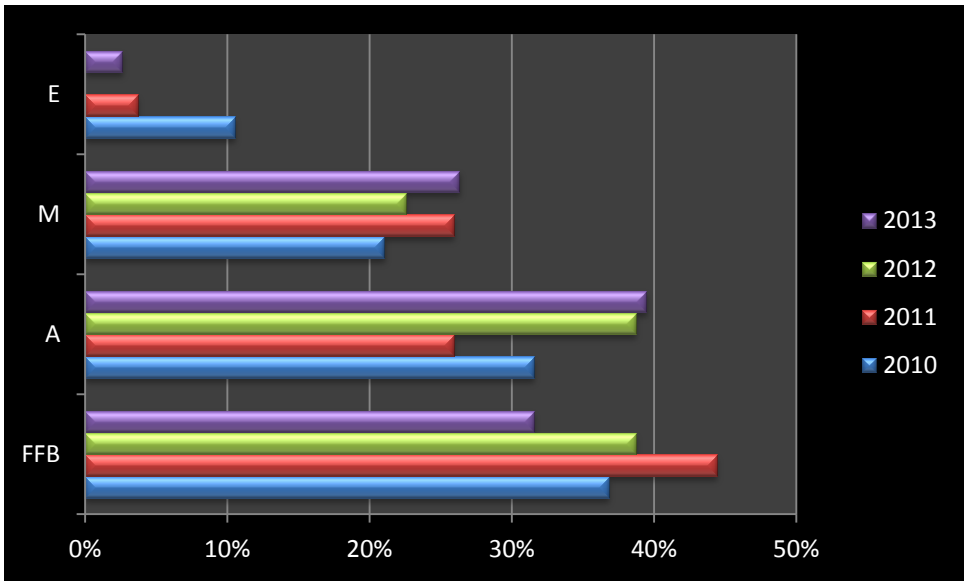
AIMS Reading Data on Free and Reduced Students



Math proficiency and Students who receive a Free and Reduced Lunch

In 2013, 32% of students who receive free and reduced lunch fell far below in reading, which is the lowest level of fell far below for this group in the four years being reported. The chart below shows that for the past three years there has been a steady decrease in the percentage that fell far below and a steady increase in the percentage that approach, meet or exceed.

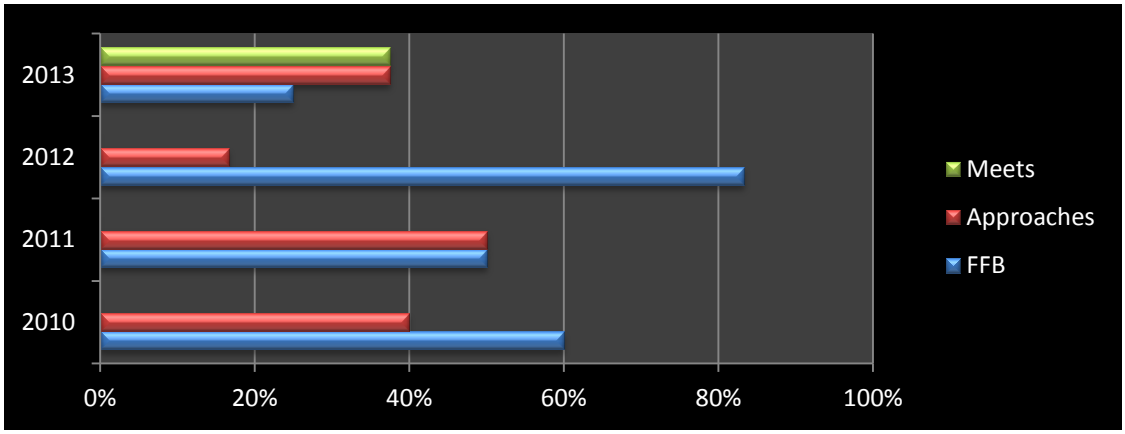
Aims Data for Math and Free and Reduced Lunch Students



Reading Proficiency for Disabled Students

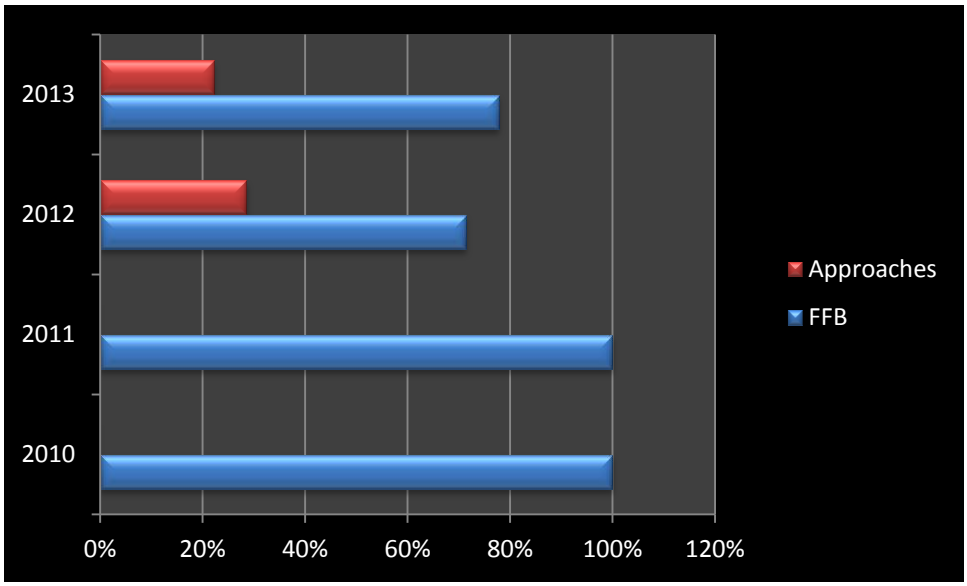
Disabled students receive accommodations approved for IEP students during the administration of the AIMS test. As none of our disabled students qualify for administration of the AIMS A, a form of the AIMS designed for severely disabled students, they all take the AIMS with these modifications. Often they are tested separately from their classmates in a small group setting. Instructions for the reading portion of the AIMS are read to them, and the wording of the instructions is simplified to assure that they understand. They are allotted as much time as they need to complete the test, but they are given more breaks.

36% of our Special Education Students have Specific Learning Disabilities in the area of Reading. The data shows that the percentage of disabled students who fall far below on the reading standards varies from year to year. Currently the percentage that fall far below is 25% which is the lowest percentage in the four years of data reported here. In addition 38% of the disabled students met the reading standards of the AIMS test in 2013, the first time any students have done so in the four years being reported.



Math Proficiency for Disabled Students

45% of our Special Education students have a Specific Learning Disability in Math. 100% of our disabled students fall far below on the math portion go the AIMS in 2010 and 2011. In 2012 29% of these students approached the standards. In 2013 22% of these students approached the standards.



ELL Students and Reading Growth and Proficiency

Currently the State count of ELL students at our school is zero. Although, officially we have no ELL students, we do recognize that many of our students come from homes where more than one language is spoken and that their language skills do need support. With this in mind, all STAR School teachers use the essential components of SIOP in their classrooms. They start all lessons by introducing vocabulary and keep it posted during the day. They teach vocabulary across the curriculum. In addition, we have instituted the STAR Literacy and language project. This five year grant provides bi-lingual teachers who carry out small group instruction in English language intervention and also provide enrichment understanding of concepts by providing immersion Navajo instruction at scheduled times outside of regular instruction. The intervention includes:

- Small group instruction daily using SIOP Model for ELL instruction
- Small group immersion in Navajo language instruction
- Testing Non-proficient students using the WIDA Model , an accepted assessment for English Language Proficiency that was deemed most reliable for our purposes by our evaluator
- Testing Non-proficient students on the VOICES Reading Assessment
- Collaborating with classroom teachers on teaching reading and English language groups

The requirement that only students who are identified on the Home Language Survey be tested with the AZELLA and in this way be identified as English Language Learners has in the past few years stood in the way of identifying these students. For what we believe are cultural and economic reasons few Home Language Surveys indicated that the student speaks more than one language at home. The school is remediating this situation by providing staff that are familiar with the requirements of the home language survey to review the survey with the parents at the time they are filling it out.

ELL Math Growth and Proficiency

All classroom teachers, when designing their lesson plans and curriculum maps, use the SIOP Standards. The School also has done training on the CREDE (Center for Research on Education, Diversity and Excellence) standards. *Developing Language and Literacy Skills across the Curriculum* is one standard in CREDE that is matched by the inclusion of Language and Vocabulary objectives in any SIOP lesson plan including those that are written for math. STAR school has for many years provided professional development and training for their staff members in both CREDE standards and the use of the SIOP model in their lesson planning. Students who may be non-proficient in English are at less of a disadvantage in our classrooms where teachers are fully aware of the standards and methods used SIOP planning.

Response to Composite School Comparison

Although we do not know the demographic makeup of the composite school to which we are being compared, it is clear from the low measures we received (-33.2 in math and – 24.8 in reading) that we need to show comparison data with schools that are, in our estimation, demographically similar to our own. The following data compares STAR School to other rural schools of similar size, serving the same or similar grade levels, with predominantly Native American Populations of similar socio-economic status.

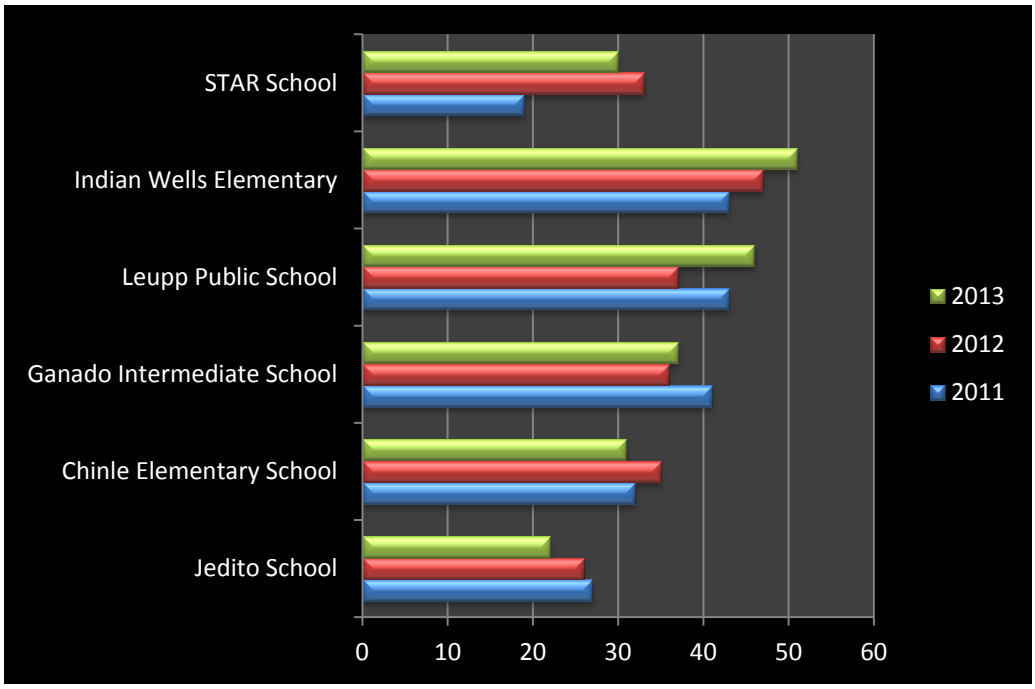
STAR School is a Charter School serving a primarily Navajo student population. This population comes from a very rural area on and near the Navajo Reservation. Reservation students live in environments where opportunities that are available, even to other socio-economically disadvantaged populations, are not available to them. These services include public libraries, recreational facilities, public transportation just to name a few.

Historical and cultural factors disadvantage our students and the students in the schools we have chosen to compare ourselves to. One of the most devastating outcomes of the boarding school period was the forcible removal of children from their families. Because of this, they did not receive the caring and nurturing of their parents and the example of the elders in their community. In addition to the devastating effects of poverty on children's educational achievement, Native American children have the legacy of educational policies that create enormous challenges. For example, many of the parents and grandparents of our students were raised in boarding schools environments. This system imposed the English language and culture on them at school, while

Navajo language and culture was practiced in their homes and communities. These held as closely as they could to their cultural traditions and a rural life style of raising sheep and cattle. Because it was more important to them to have the children at home to help with the chores and in an environment where cultural traditions were taught, resentment against the educational system became widespread. The next generation learned Navajo less fluently, but had only the broken English learned by their parents as an example outside of school. Although English was spoken more fluently by the succeeding generation, the English spoken in homes is not Standard English and habits of reading to children at a young age are not present in the homes of current reservation students. A resentful attitude towards education remains widespread, coupled with the old mentality that the school will care for the education of the children. Besides these historical boundaries, parent participation in education is also impeded by the common situation where both parents work far from the reservation. Latch key situations are common. Facilities such as YMCAs or Boy's and Girl's Clubs are non-existent. A supervised environment for doing homework is often unavailable, and most learning must happen during school hours and in after-school tutoring programs.

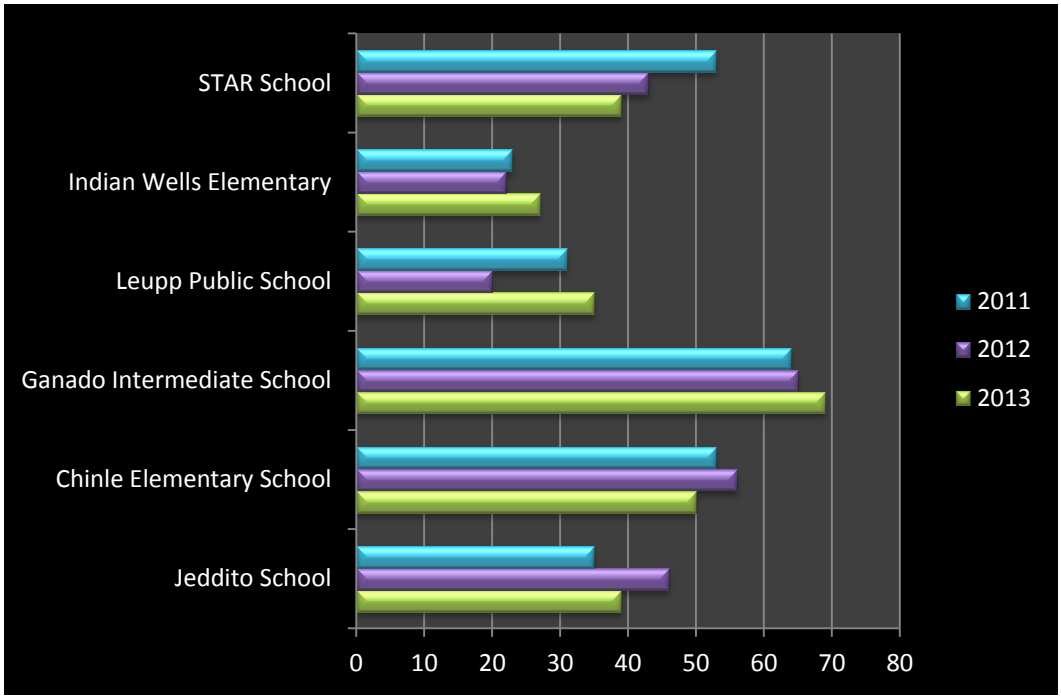
The graphs and charts show comparisons with schools that are located on or near the Navajo reservation. Short discussions follow each set of data.

AIMS Performance (Math % Passing) Local Native American Schools



Although 5 schools in this group scored higher on math, our score of 30% passing is just below the median score of 34 for this group. Math scores are obviously a concern, not only at our school, but at most schools in our demographic comparison group; only one school scoring above 50% in any of the last three years.

AIMS Performance (Reading % Passing) Local Native American Schools



STAR School has increased its percent passing each year, and though some of the schools have higher percentages passing, we are the only school in this comparison group that is consistently trending towards improvement in reading percentage passed. We fully expect to continue improving our reading scores, especially with our drive toward getting more independent reading level books into our student's hands through our Language and Literacy grant, discussed earlier.