Shonto Preparatory Technology High School

Shonto Preparatory Technology High School (SPTHS) was established in 1998 by local visionaries and educators and supported by a vast multiplicity of diverse stakeholders whose united dream and vision was to seek a local secondary institution that would greatly prepare students to grow and journey from adolescence to adulthood. Furthermore, they sought to further strengthen communities by developing strong leaders who are academically prepared to meet and embrace a demographically-diverse world; one with ever-increasing human needs coupled with a very challenging global marketplace. The powerful and continuous discourse between key stakeholders at that time provided the rich foundation and eventual framework for SPTHS.

Clearly, the origin of SPTHS was one molded and driven by a genuine desire to develop a secondary institution readily accessible to rural communities toward eliminating prolonged commutes for students, to encourage parental, family and full stakeholder involvement through data-driven decision-making and strategic planning, and to create an academically-rich and challenging curriculum that would empower and engage students in higher-order thinking and problem-solving driven by project-based learning and undergirded with 21st century technology. SPTHS seeks to prepare students to master seven survival skills inherent within the world of work as defined in *Educational Leadership* (October 2008, "Rigor Redefined", Volume 66, Number 2, pgs. 20-25). The skills that drive and further defines SPTHS's academic rigor are as follows:

- Critical Thinking and Problem Solving
- Collaboration and Leadership
- Agility and Adaptability
- Initiative and Entrepreneurialism
- Effective Oral and Written communication
- Accessing and Analyzing Information
- Curiosity and Imagination

Shonto Preparatory School (SPS) embraces an open enrollment and admission policy that is not limited or based on ethnicity, national origin, gender, social economic status, income level, disability, religion, language, and/or abilities. There are no tuition fees for attending SPTHS. An enrollment of 150 students, grades 9-12, currently attend SPTHS with a teacher-student ratio 14:1. The school is a small and an innovative charter school with the goal of becoming "the" premier charter public high school driven by exemplary academic excellence. The first years of SPTHS served sixth through tenth grades. As the years progressed (adding a grade higher each year), SPTHS transitioned to a 9th-12th grade school with the first graduating class walking the stage in 2001. In March of 2005, groundbreaking ceremonies began for the new high school, which was completed in August of 2006. SPTHS is committed to defining, redefining and implementing academically-rigorous college-preparatory curriculum inclusive of current "Best

Practice" methodologies coupled with implementation of programs that identify and engage students who are academically-gifted and/or academically-challenged and/or behind (or at risk of falling behind) and provide evidence and research-based academic, behavioral, emotional and/or psychological, and cultural interventions that support successful outcomes.

In conclusion, the framework for the "Educational Philosophy" of SPTHS is deeply rooted and pedagogically-intertwined within a majestic holistic (cultural, academic, social, emotional/psychological, physiological, and spiritual) exemplary learning environment that artfully combines a blending of specific skills, content knowledge, expertise and multiple literacies aligned with innovative and transformative support systems to assist in student mastery of multi-dimensional abilities required of them within the 21st century.

Data Analysis

The findings from the data analysis allowed Shonto Preparatory Technology High School to thoroughly analyze the need for a more comprehensive data base. In the last year and half, the implementation of various assessments has begun and data collection and analysis has been established. Not only is AIMS data used to analyze student achievement, but quarterly Galileo benchmark assessments have been implemented to further analyze student gains as well as deficiencies to drive instruction.

The school has established baseline data to measure growth and has collected comparison data from other local schools to analyze the achievement status of the school. As more data is collected, a positive transformation is occurring in the school and the need to achieve has been recognized.

To support the academic data, Stanford 10 and Terra Nova scores are also used to analyze student achievement and school improvement plans. STAR Reading and Math scores also have been used various years to improve reading and math scores.

Other data have also been collected such as data regarding English Language Learners, School Lunch Programs, Special Education, Cultural surveys, Highly Qualified Teachers, Student-Teacher ratios and School Improvement Information, Johnson O'Malley data.

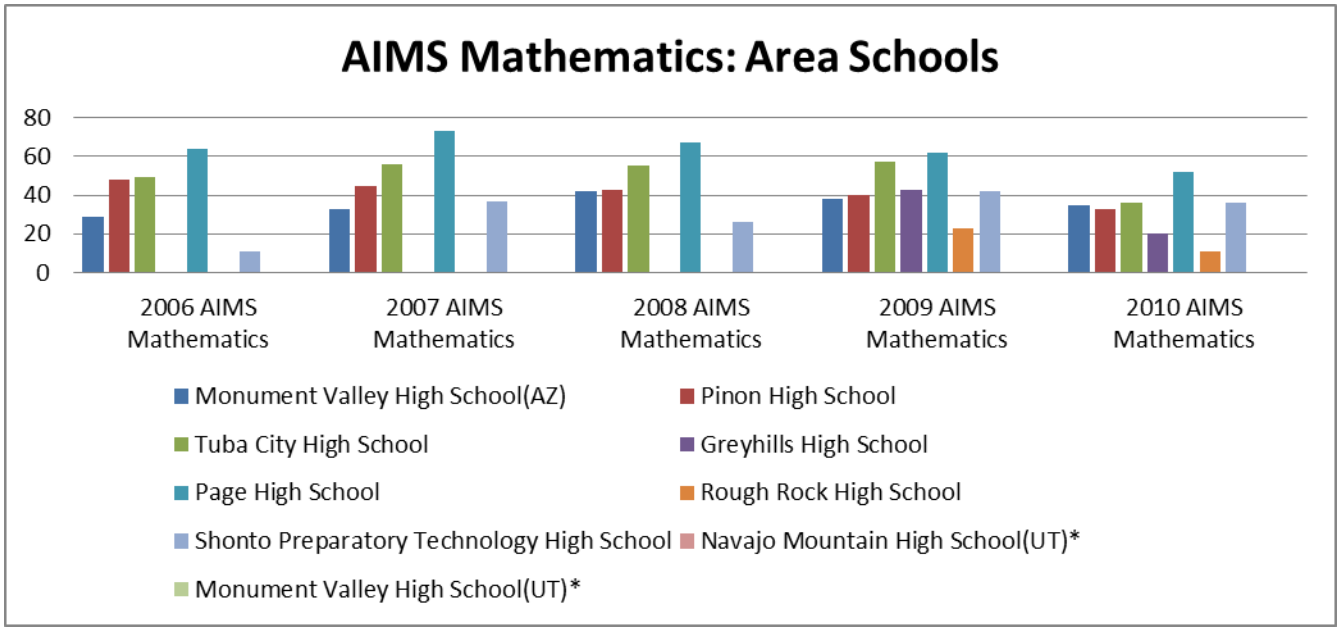
The following chart indicates that regardless of not making Adequate Yearly Progress, gains have been made every year to move toward meeting the AMO for AYP.

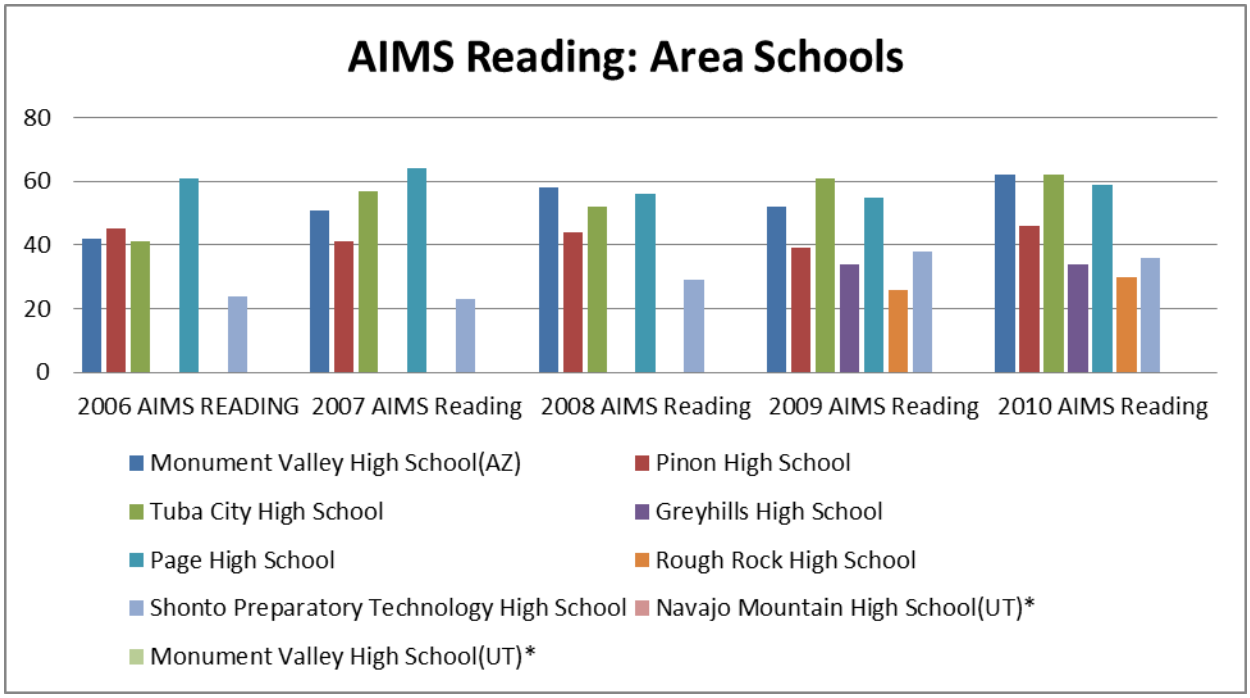
	AZ Learns	**AYP**	**School Improvement Status**
2010-2011	Performing	No	SY 1 Restructuring Hold
2009-2010	Performing	No	SY 1 Restructuring
2008-2009	Performing	No	School Improvement Y3
2007-2008	Performing Plus	Pending	NA
2006-2007	Performing	No	School Improvement Y2
2005-2006	Performing Plus	No	School Improvement Y1

Data Comparison to Local Schools

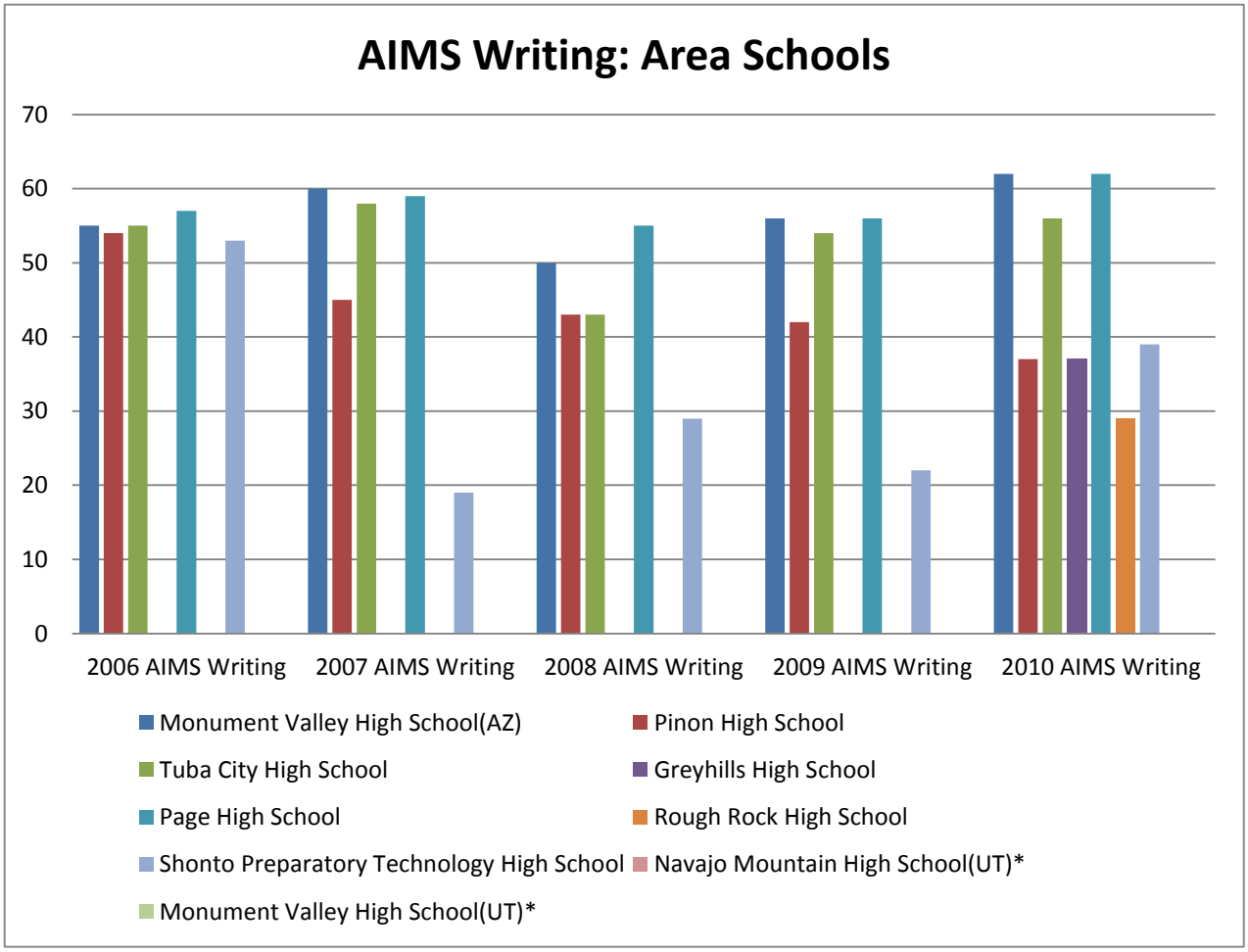
Shonto Preparatory Technology High School is compared to local schools that have similar population and consist of both public and Bureau of Indian Education schools. The schools indicated on the graph have predominately Native American students and are located in a sixty mile radius from Shonto.

The following figure Shonto Preparatory High School's AIMS Mathematics data compared to Monument Valley High School, Tuba City High School, Page High School, Pinon High School, Greyhills High School, and Rough Rock High School. Monument Valley High School (UT) and Navajo Mountain High School (UT) is included only because it is in close proximity to the Shonto.





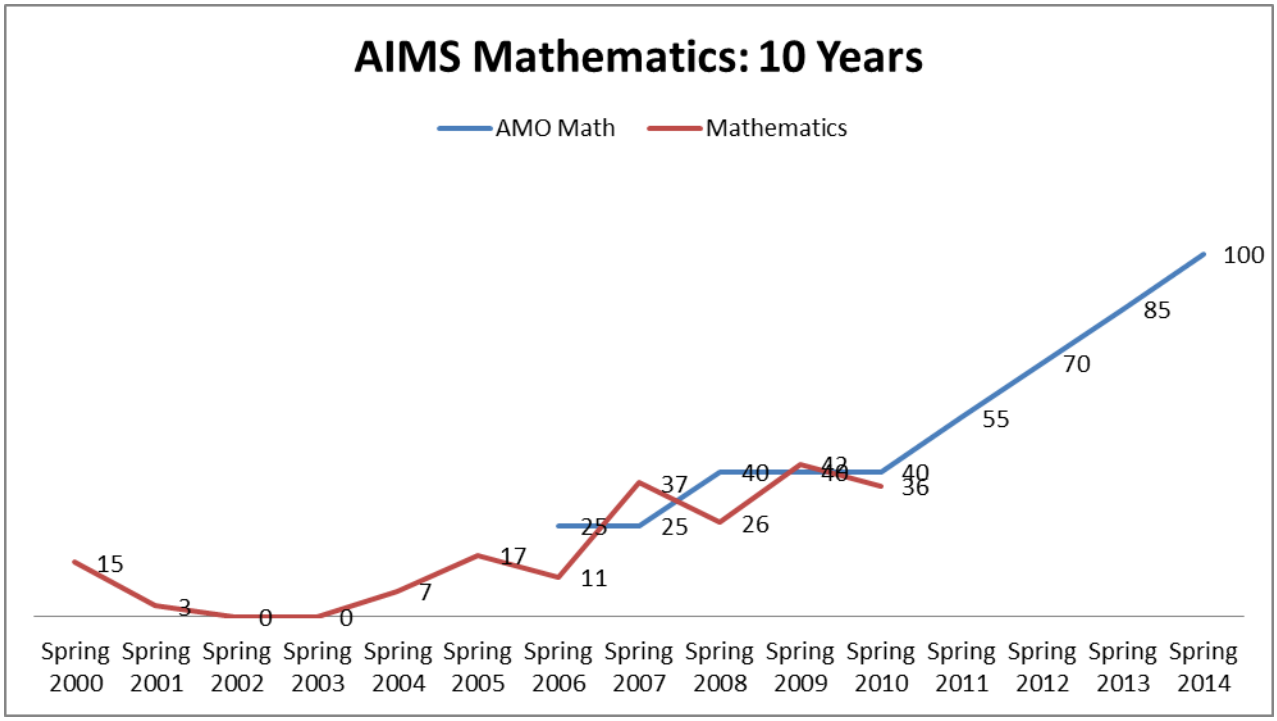
In the following charts, AIMS reading and writing data is also compared to the same schools in the last five years. This data shows the academic status and helps the school to utilize the information as a guide for School Improvement. The data is also used for strategies to improve teaching techniques, as well as effective curriculum maps that allow for implementation of research based strategies.

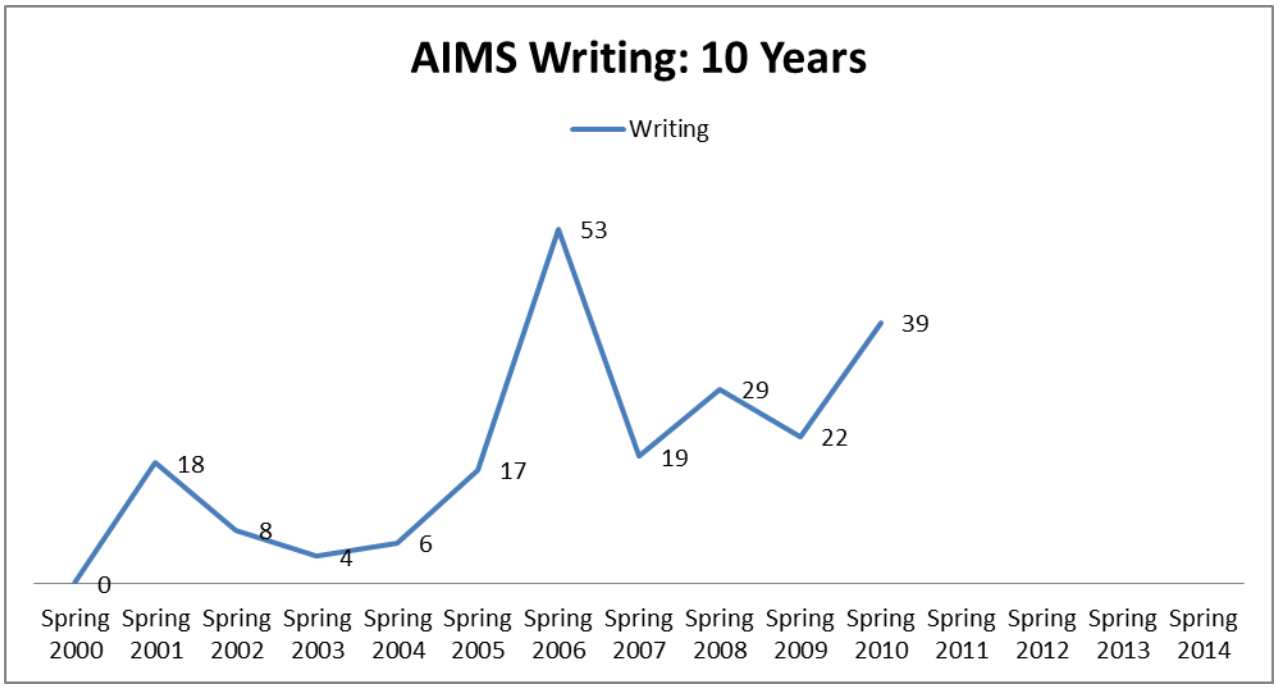


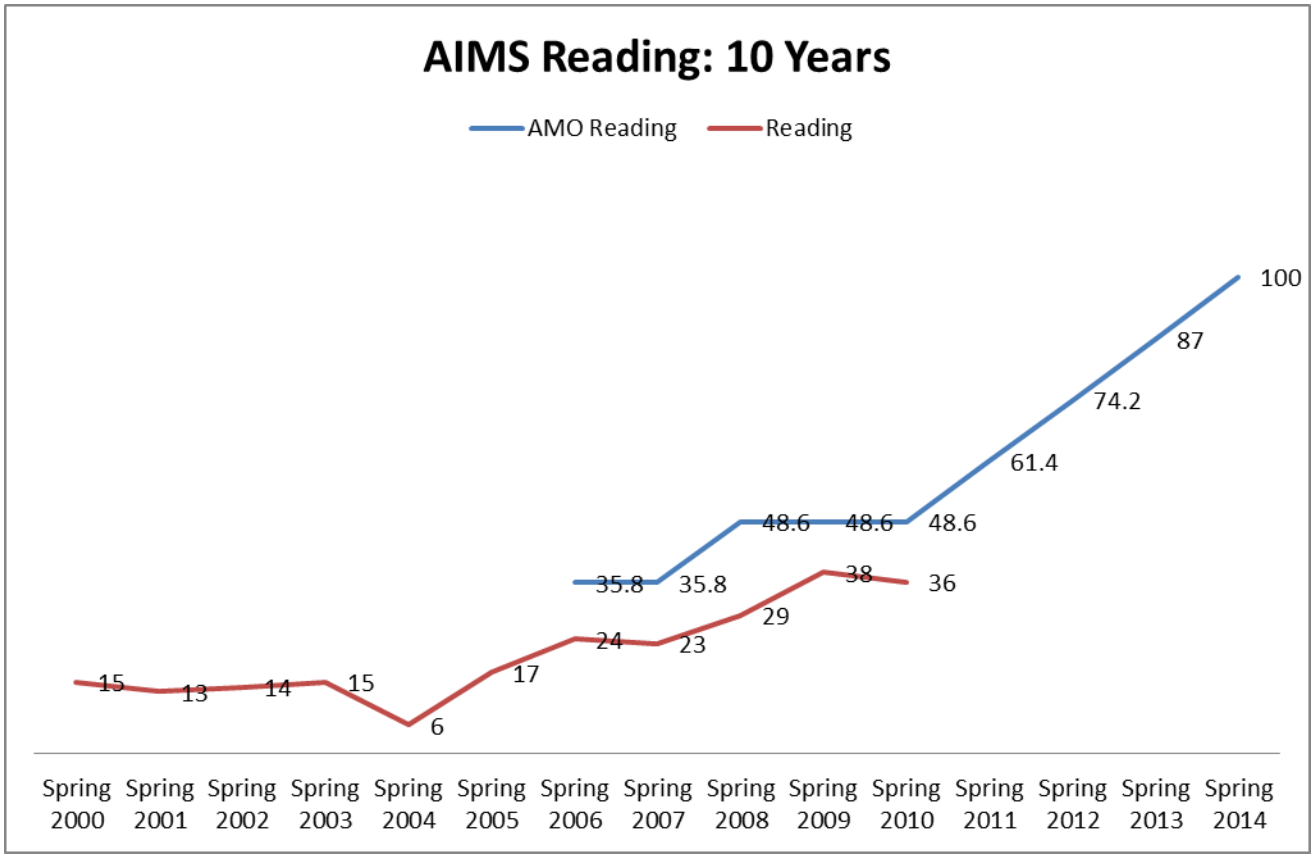
Ten Year School Data

In the chart for AIMS data for math, writing and reading, a significant drop in 2002 and 2003 is shown and can be accounted for due to displacement of Shonto Preparatory Technology High School. SPTHS first moved into various buildings that housed classrooms and later transitioned to modular buildings until the new high school building was established. In the last five years, the scores have fluctuated due to high administration turnover. Although there have been many obstacles, the school has been able to make considerable gains in each content area.

The Ten Year data helps to analyze student achievement, as well as other factors to eliminate possible downfalls and strategize to overcome obstacles and make changes that will positively impact student achievement.

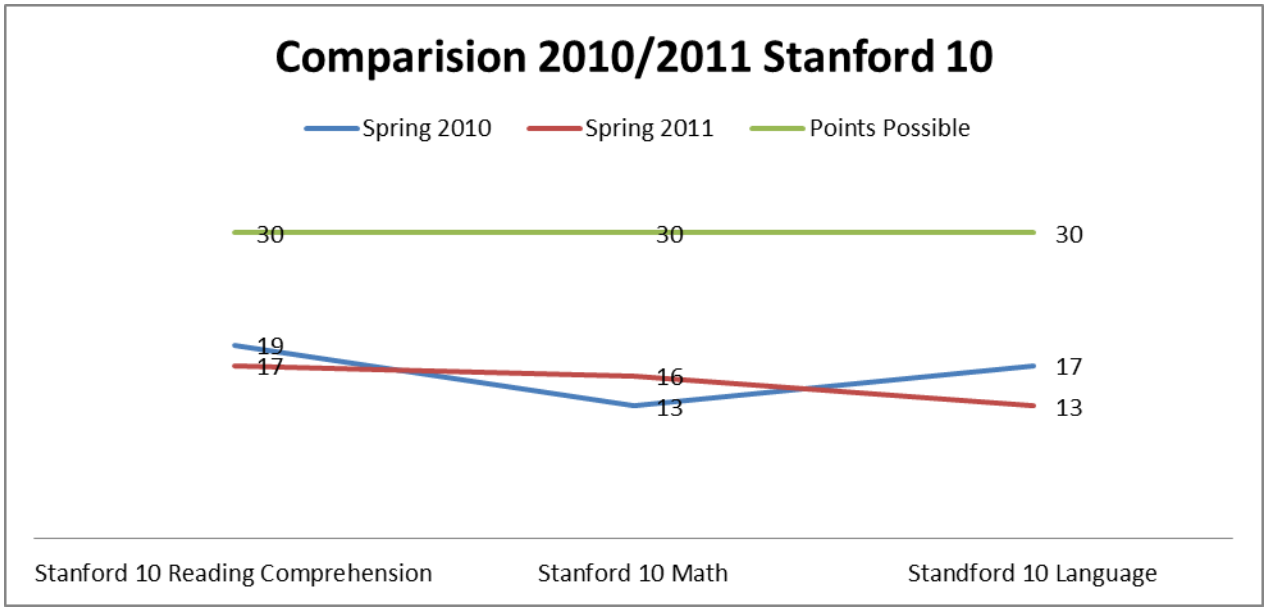

AIMS Mathematics: 10 Years
AMO Math
Mathematics
15
3
0
0
7
17
11
25
37
25
40
26
42
40
40
36
55
70
85
100
Spring 2000
Spring 2001
Spring 2002
Spring 2003
Spring 2004
Spring 2005
Spring 2006
Spring 2007
Spring 2008
Spring 2009
Spring 2010
Spring 2011
Spring 2012
Spring 2013
Spring 2014


AIMS Writing: 10 Years
Writing
0
18
8
4
6
17
53
19
29
22
39
Spring 2000
Spring 2001
Spring 2002
Spring 2003
Spring 2004
Spring 2005
Spring 2006
Spring 2007
Spring 2008
Spring 2009
Spring 2010
Spring 2011
Spring 2012
Spring 2013
Spring 2014



Stanford 10 Data

Stanford 10 data has shown fluctuation and can be accounted for high teacher turnover in the Language Arts content area. Mathematics shows some gain due to consistency in instruction. The lack of targeted professional development for teachers, inconsistency in a uniform curriculum and also a high influx of transient students also are factors in the fluctuation of scores. This allows the school to pursue viable and stable curriculum program like the Teach for Success instructional model that is currently being implemented.



Reading

Improving Student Achievement

Integration of the Arizona Academic Standards into daily instruction has been an important emphasis at Shonto Prep Tech High School. Each year SPTHS staff review and evaluate the curriculum and prepare four quarter curriculum plans based on the Arizona Standards Blueprint for each content area class. Currently, we are in the early stages of aligning our curriculum to the Common Core Standards for Reading. Summer teacher workshops are planned to complete curriculum maps to insure implementation for the upcoming school years.

Each certified teacher is required by the school and the state of Arizona to complete a SEI (Structured English Immersion) Endorsement. Professional development is also provided upon request by the Secondary Reading Coach. In addition to providing staff with professional development, there is an intervention process in place to identify students based on their student test scores. The following "RtI Model" provides an instructional/intervention framework for students who have been identified into one of three tiers for the purposes of intervention.

RTI Process for Shonto Prep Tech High School	
1. **Administer** a screening test.	5. **Prepare** classroom lessons.
2. **Administer** an informal assessment to students (Phonemic awareness, letter naming/sounds, phonics).	6. **Provide** targeted instruction to each skill group.
3. **Analyze** the data from the	7. **Provide** targeted instruction to

informal assessment and **identify** the skills needed.	each skill group.
4. **Group** students according to the skills needed.	8. **Progress monitor** intensive students every two (2) weeks, strategic students every (3) three weeks, and cut-line benchmark students once (1) a month.
9. **Repeat Process!!!**	

Tier I Reading Instruction.
All students receive standards based instruction for Core Reading in our Literature classes and core content areas.

Tier II Reading Instruction.
Students identified as "Strategic" according to our assessment receive extra reading instruction by our reading teacher using our "Read to Achieve" program.

Tier III Reading Instruction.
Students identified as "Intensive" Tier III instruction accompanied by "Tier I" Core instruction and "Tier II" intervention.

Math

Improving Student Achievement

Shonto Preparatory Technology High School completed their curriculum map for the mathematics which is aligned to the Arizona Academic Standards in June, 2011. Currently, teachers are realigning the math curriculum to the Common Core Standards with the goal of implementing Common Core Standards for the Fall of 2011.
It is the goal of SPTHS to focus on providing various academic intervention programs to support student learning. The following is a list of interventions that have proven to impact student achievement:

- Aligned curriculum to Arizona State Standards
- Title 1 AIMS intervention classes
- Structured tutoring program
- Saturday AIMS intervention program
- Test-taking strategies
- AIMS intervention/remedial instruction
- AIMS math word of the day

More importantly, teachers have embraced the school's initiative to transform student learning through data analysis using the data to drive teacher instructional planning. Math teachers

along with other content teachers have attended professional development in the areas of differentiated instruction, data analysis, lesson planning, lesson delivery and student engagement. As a result of the many interventions, data shows a significant growth in the 2011 state test scores.

Findings and Plans

In conclusion, the data collected allows the school to create data driven curriculum so students may achieve adequate yearly progress. In the areas of documenting student achievement, the school leadership team has developed a three year strategic plan to record assessment data and require all teachers to review and monitor student progress on a consistent basis. Quality professional development will be provided to assist teachers in the areas of data-driven instruction, curriculum mapping, student engagement, lesson planning and delivery. More importantly, academic coaches will support teacher effectiveness in the classroom. As SPTHS continues to strive for student achievement, the initiative to "*Transform Student Learning*" through the school's six core principles; *Dine Language Culture Preservation, Teaching and Learning Effectiveness, Excelling Student and Staff Performance, Safe and Efficient Support Systems, Strong Parent, Community Global Involvement, and 21st Media and Technology Skills.* Key stakeholders are ready to embrace the many opportunities and challenges of becoming a highly successful secondary academic institution.