Maxwell AFB Elementary/Middle School
School Profile

800 Magnolia Boulevard
Maxwell AFB, Alabama 36112
334-953-7804
www.am.dodea.edu/maxwell

Melissa A. Hayes
Principal

School Improvement Team

Dawn Hoffman – Chair
Grace Canton
Carolyn Cohen
Loretta Jones
Kathi Rogers
Joyce Yancey

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Core Values / Belief Statements

Our journey of school improvement began with identifying our core values and beliefs. The faculty, staff, and parents joined in the process of developing our belief statements. Our learning community believes in:

- Modeling active learning with 100% participation (students, parents, instructional support, teachers, and administrators)
- Providing a place where students learn to be responsible citizens, problem-solvers, and life-long learners
- Helping each child succeed above and beyond
- Creating an environment where learning is fun, challenging, and achievable for every child
- Doing Whatever it Takes to meet the needs of each child to excel to his or her fullest potential

Vision

Whatever it Takes!

School Mission

A community partnership enabling students to fulfill dreams and reach their highest potential

DODEA Mission

To Provide an Exemplary Education that Inspires and Prepares All DoDEA Students for Success in a Dynamic, Global Environment

Overview of the Community & School

Maxwell Air Force Base Elementary School was established in 1963 in Montgomery, Alabama. Since its inception, the school has provided educational services for military dependents living in permanent housing on Maxwell Air Force Base. In 2002, students who resided at Gunter Annex were declared eligible to attend the school. Maxwell AFB Elementary increased to include grades seven and eight in July of 2011. The name of the school was officially changed to Maxwell AFB Elementary/Middle School (MEMS). Maxwell/Gunter AFB is considered to be the "Intellectual and Leadership Center of the Air Force." Air Force families are stationed at Maxwell for the purpose of attending one of the installation's many leadership schools or as permanent party instructors or support personnel for the mission. Maxwell AFB is a learning community. Since 1996 MEMS has been a part of several Department of Defense Domestic Dependents' Elementary and Secondary Schools (DDESS) consolidations. Currently, the school is one of three sites in the Georgia/Alabama DDESS System.

The physical plant at MEMS is a traditional building with 44 classrooms, 26 of which have restrooms. The school also houses an Information Center, cafeteria, gymnasium, music room, art room, a health office, and an Alabama Wildlife Federation outdoor classroom. Additional facilities include an auditorium with sound system, two computer labs, a science lab, and three teacher preparation areas.

Maxwell Elementary/Middle School offers a comprehensive course of study for all students based on the DoDEA Curriculum Standards. Integrated special education services enable staff to focus on individual student needs. Additional support is provided through a Gifted program as well as with the 3-year early intervention program (PSCD). Instruction is provided for all students in art, music, and physical education.

Each student has the opportunity during the year to be spotlighted on the PTO sponsored bulletin board. "SPOTLIGHT ON STUDENTS" supports the MEMS writing goal by having students create their own profile which states their highlighted qualities. A variety of leadership opportunities are available to students such as acting as D.J.s on MX Radio (morning announcements) and participation in the award-winning Youth Leadership Team. Participation in extracurricular activities such as the art club, choir, and Lego Robotics League are available to the students.

An active PTO provides support for the instructional program and school goals. The PTO provides volunteers for our school-wide writing project. Students write, illustrate, and publish books. PTO volunteers assist students in writing and editing and provide for an Author's Celebration in May. Students participate in World Math Day in the spring.

Community involvement is evidenced through special events, community projects, including Fire Prevention Day, Law Day, STARBASE, Red Ribbon Week, Arbor Day, and Month of the Military Child activities. Maxwell Elementary students participate in essay and poster contests and perform at assemblies related to community celebrations. The Maxwell Eagle Choir provides musical entertainment for Base and local community functions.

An Administrative Technologist (AT) provides technical support for the school's data processing systems, including installation, upgrading, administration, and trouble-shooting of all networks, both local and wide area. Technological support and inventory includes desktop computers, laptops, servers, copiers, printers, scanners, SmartBoards, and "Elmo" projectors.

School Program

Curriculum standards = content + process and performance standards

Maxwell AFB Elementary School's academic curriculum is in compliance with DoDEA requirements and curriculum standards in academic disciplines: Reading/Language Arts, Math, Science, Social Studies. The faculty and staff are committed to following the DoDEA Community Strategic Plan (CSP) with the #1 goal being Highest Student Achievement.
The DoDEA curriculum grade-level standards guide instructional planning as well as formative assessments used by the teachers. In addition to the academic areas of Reading/Language Arts, Mathematics, Science and Social Studies, students receive instruction or participate in:

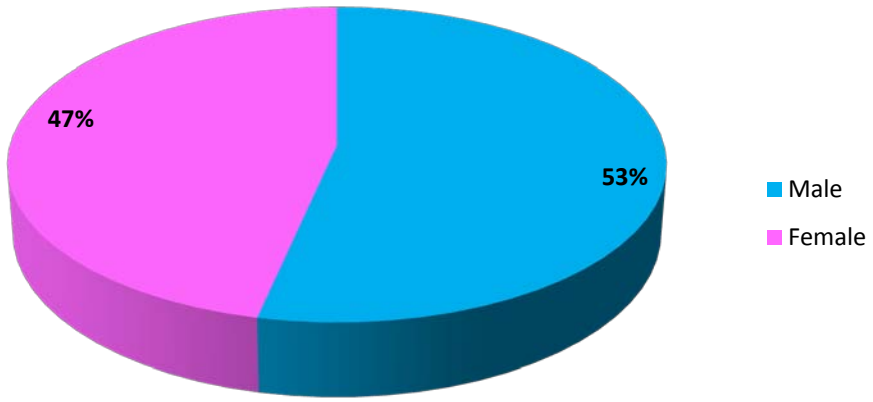
- Guidance
- FLES (Foreign Language in the Elementary School)
- Music Education
- Reading Counts
- Physical Education
- Visual Arts Education
- Technology
- Library
- Computer Applications
- Computer Applications – Lego Robotics
- Research

For students requiring extra academic support, Maxwell AFB Elementary School offers the following programs:

- Gifted Education
- Read 180
- Special Services
    - Speech Therapy
    - Mild-Moderate Learning Impaired Program
    - Pre-School Child Development Program for 3 year-olds (PSCD)

Unique and Local Insights

Current School Demographics
Student Population by Gender

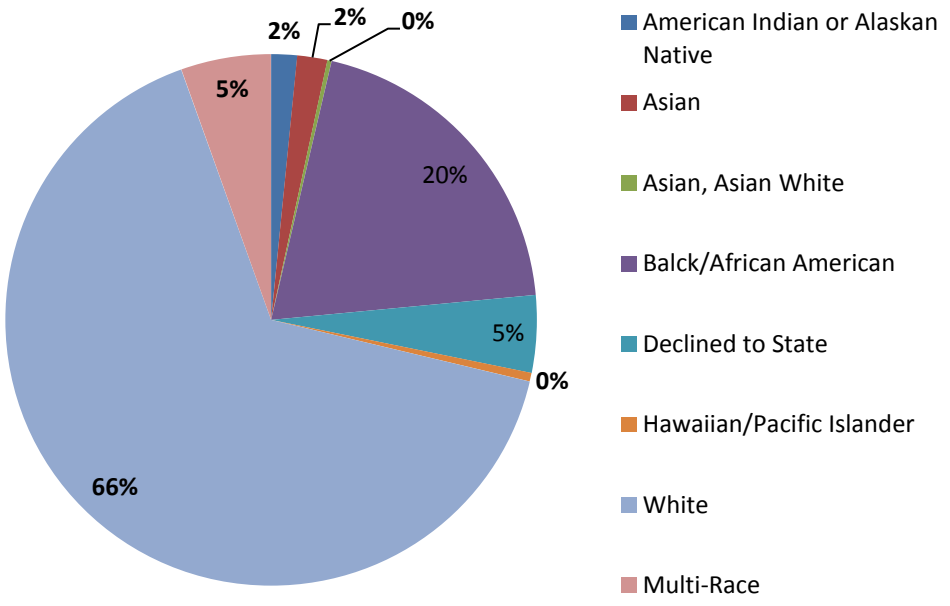


Total Population/ n=393

Chart 1

Chart 1 shows the student population at Maxwell AFB Elementary/Middle School by gender. The school population consists of 183 female students (47%) and 210 male students (53%). The total number of students enrolled is currently 393.

Student Population by Race

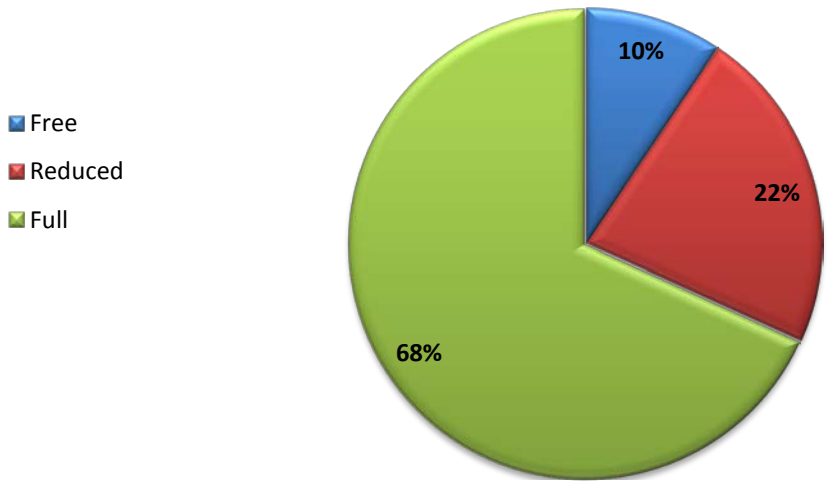


Total Population / n=393

Chart 2

Chart 2 shows the student population at Maxwell AFB Elementary/Middle by race. The population consists of 252 White students (66%), 76 Black / African American students (20%), seven Asian (2%), one student Asian, Asian White (0%), two students Hawaiian/Pacific Islander (0%) , and 7 Asian (2 %). Three students declined to state (5%).

Student Population by Free and Reduced Meal Rate

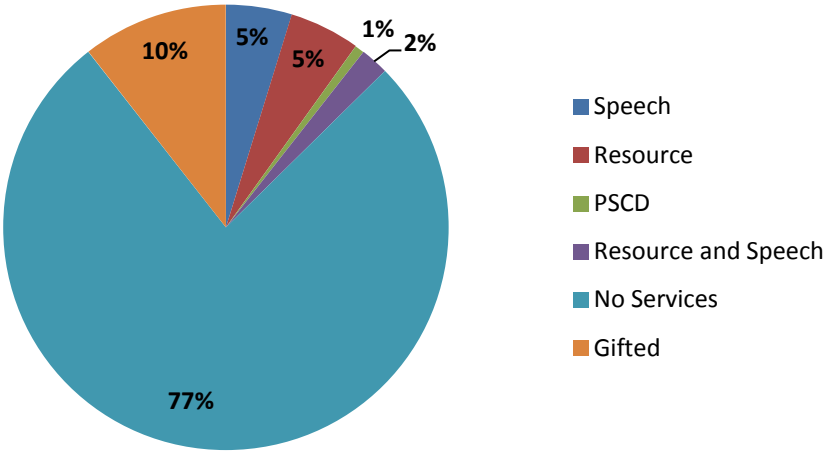


Total Population / n=393

Chart 3

Chart 3 shows the student population at Maxwell AFB Elementary/Middle School by Free and Reduced Meal Rate. Maxwell AFB Elementary serves a hot breakfast and lunch daily. The population consists of 393 students (68%) paying full price for breakfast and lunch, 88 students (22%) paying reduced prices for breakfast and lunch, and 37 students (10%) on the Federal Child Nutrition Free Lunch program. The total number of students enrolled is currently 393.

Student Population by Services

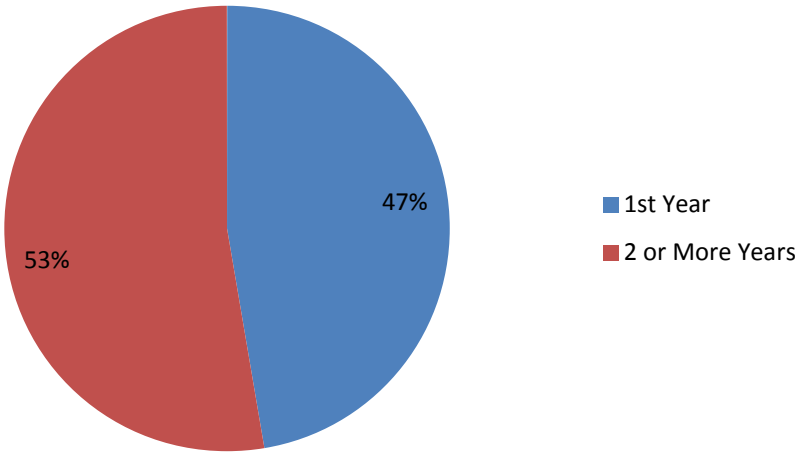


Total Population / n=393

Chart 4

Chart 4 shows the student population at Maxwell AFB Elementary/Middle School by services. The population consists of 14 students (5%) receiving speech services only, 6 students (2%) receiving both speech and resource services, 15 students (5%) receiving resource services only, 2 students (1%) receiving services through our Pre-School Child Development Program (PSCD), 31 students (10%) receiving services through our gifted program, and 225 students (77%) that receive no specialized services. A total of 30 students receive services with a current Individualized Education Plan. The total number of students enrolled is currently 393.

Maxwell AFB Turnover Rate



Total Population / n=393

Chart 5

Chart 5 shows the student population at Maxwell AFB Elementary/Middle School by our turnover rate. The population consists of 207 new students (47%) and 186 returning students (53%) Maxwell-Gunter AFB is the location for the Air Force's Air University. Many of the families who are stationed at Maxwell are here to attend one of the many courses offered to officers and enlisted Air Force personnel. Those courses range in duration from six weeks to one year.

Existing School Data

Student Performance Data and Disaggregation

Trend Data

Maxwell AFB Elementary Terra Nova, 2nd Edition 2005-2008
50th Percentile (Median) Normal Curve Equivalent (NCE)* - Language

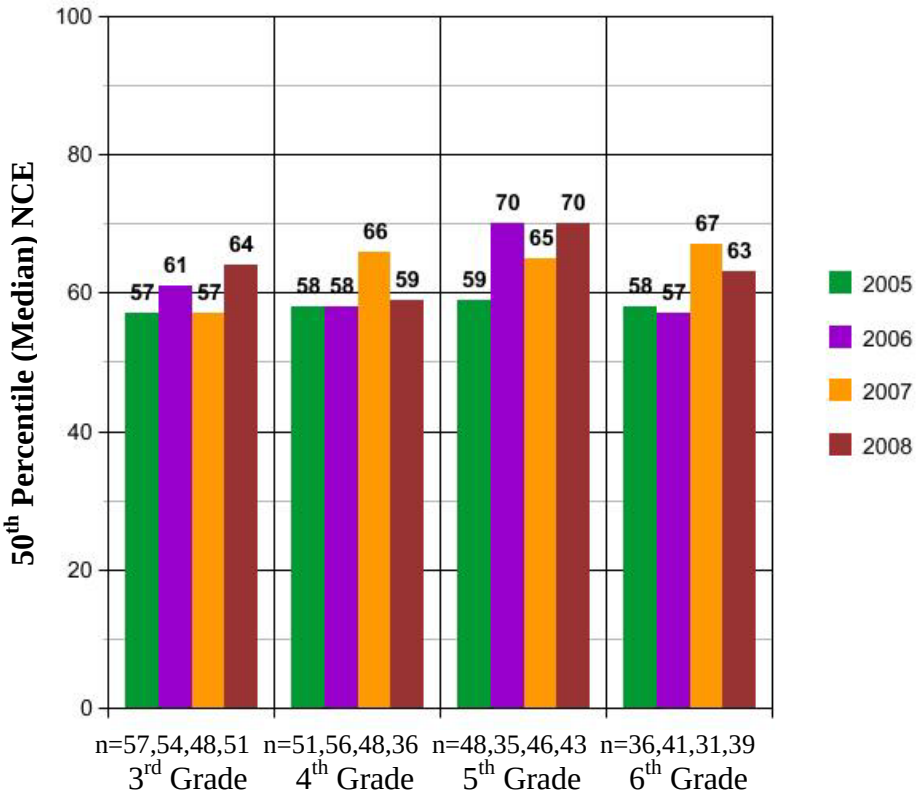


Chart 6

Findings: Chart 6 illustrates the 50th percentile (Median) NCE for grades 3-6 on the Terra Nova, 2nd Edition in the content area of Language over a 4-year period. Baseline year for this assessment is 2005, where the (Median) NCE scores were all between the 57th and 59th percentile.

Analysis: Chart 6 indicates scores that are inconsistent from year to year; however these scores show a gain within each grade level from the baseline year to 2008.

Growth in Maxwell Elementary School Students' TN 3 Language NCE Scores by Grade Level and School Year

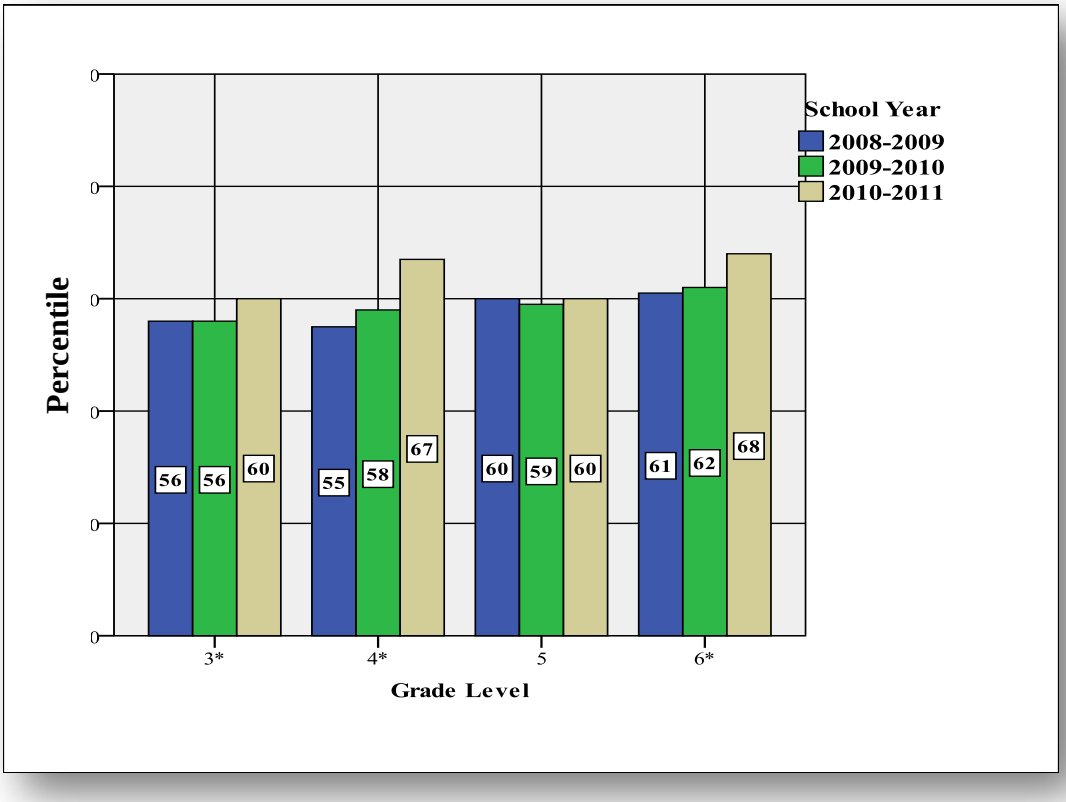


Chart 7

TN 3 Language content test: NCE scores. Goal 1 calls for a test of the growth in NCE scores as a measure of the effectiveness of the 6+1 Traits writing intervention. The CSIT set its growth criterion as a 2-point increase in TN 3 Language content test NCE scores. The analysis determined that a two-point increase in NCE scores equates to a substantial increase in the percentage of students in the top two quarters.

Chart 7 shows data from the TN 3 NCE content scores. The vertical axis represents the number of NCE points; the horizontal axis represents students' grade levels; while the inset in the upper right corner color codes the school year along the horizontal axis. Asterisks, if any, visually denote whether the NCE point differences are at or exceed the CSIT's projected two-point increase. Please note that the source for Chart 7 is the DoDEA HQ and the GA/AL TN 3 databases.

Illuminating the growth of NCE scores, the data reveals that, from SY 2008-2009 to SY 2010-2011, Grade 3, Grade 4, and Grade 6 students' NCE scores grew in excess of the two-point growth criterion.

No growth is evident in the Grade 5 NCE scores. These data suggests that the writing intervention is largely successful at increasing the percentage of students that learn content knowledge at the higher levels. The intervention effectively produces positive change in 75% of the grade levels.

Maxwell AFB Elementary Terra Nova, 2nd Edition 2005-2008
Objectives Performance Index (OPI)* - Language – Writing Strategies

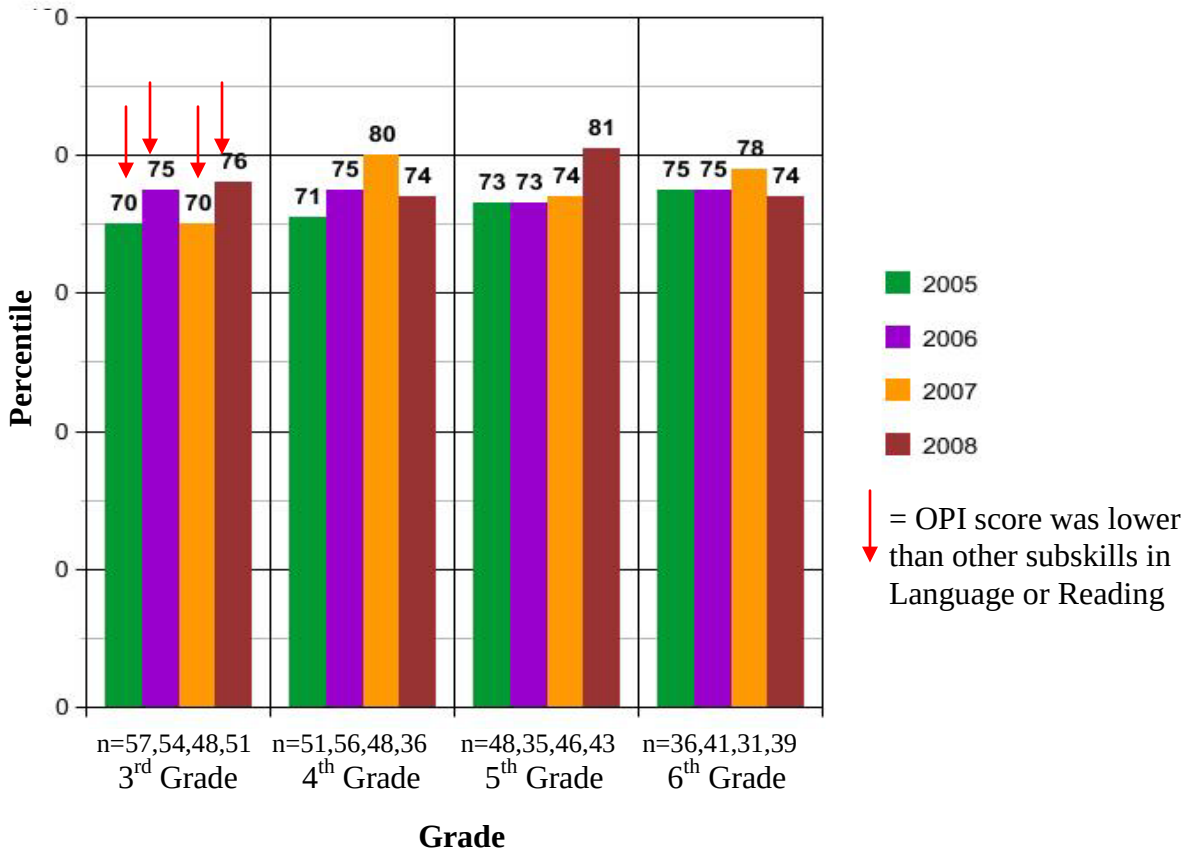


Chart 8

Findings: Chart 8 illustrates the OPI scores on the Terra Nova, 2nd Edition for the Writing Strategies objective in the content area of Language over a 4-year period. Baseline year for this assessment is 2005. All scores were at or above the 70 percentile.

Analysis: Chart 8 chart indicates an increase in scores in grades 3, 4, and 5 over the 4-year period. Groups from 2005 progressively improved as they moved up in grade levels. OPI scores for grade 4 in 2007 were at the 80th percentile, and remained high at the 81st percentile the following year.

Percentage of Maxwell Elementary School Students Mastering the TN 3 "Writing Strategies" Language Sub-Skill by Grade Level and School Year

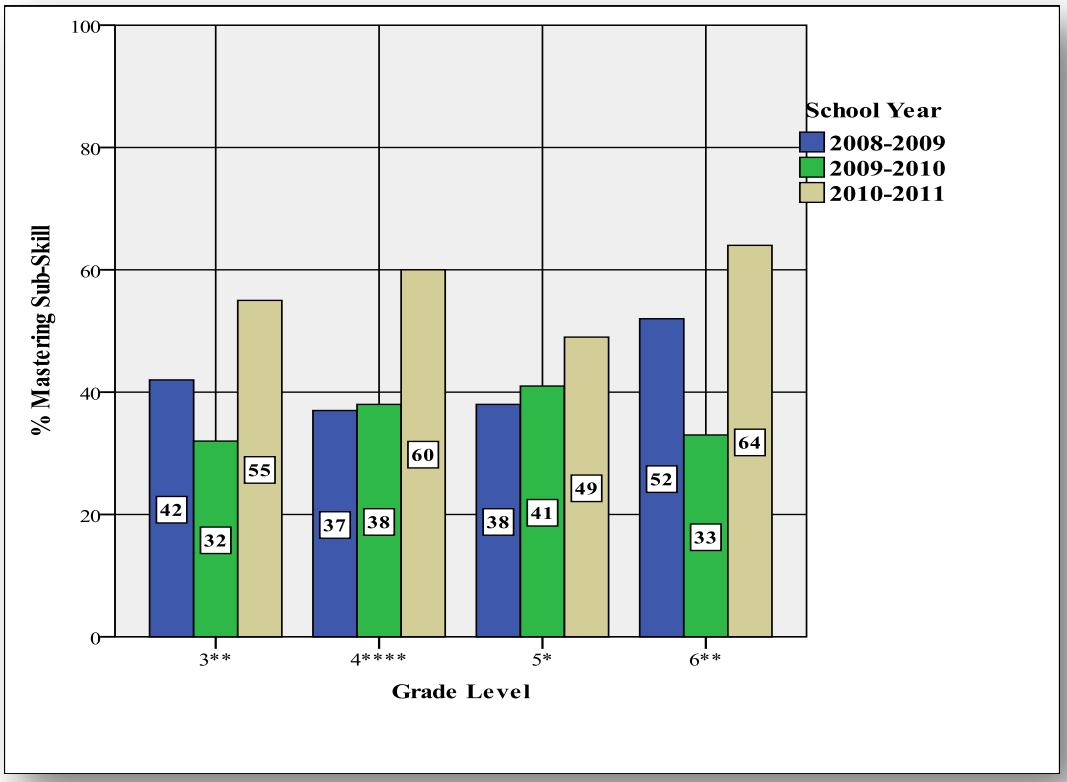


Chart 9

TN 3 OPI Writing Strategies sub-skill assessment. Chart 9 shows data from the system-wide TN 3 OPI Writing Strategies sub-skill assessment. The horizontal axis represents students' grade levels; while the inset in the upper right corner color codes the school year along the horizontal axis. Asterisks, if any, visually denote the size of percentage differences. The source of the data in Chart 9 is the DoDEA HQ and the GA/AL TN 3 databases.

Illustrating the effect of the 6+1 Traits writing intervention, the data reveals a general and positive increase in the percentage of students that master the Writing Strategies sub-skill. That is, between the baseline SY 2008-2009 and the SY 2010-2011 current year the percentage of Grade 3students that mastered Writing Strategies skills underwent a moderate increase; that of Grade 4 students underwent a large increase; that of Grade 5 students underwent a small increase; while that of Grade 6 students underwent a moderate increase. These data strongly suggests that the 6+1 Traits intervention is highly effective for increasing grade 3-6 students' strategic writing

Percentage of Maxwell Elementary School Students Mastering the TN 3 "Sentence Structure" Language Sub-Skill by Grade Level and School Year

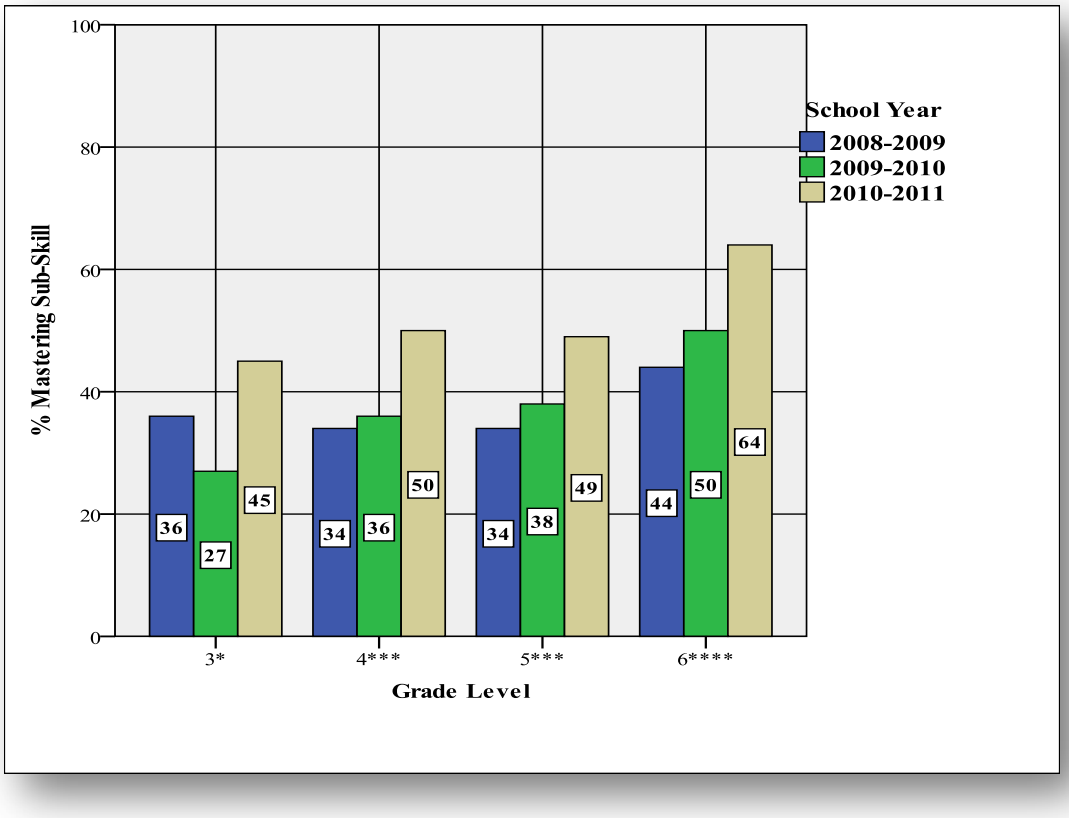


Chart 10

TN 3 OPI Sentence Structure sub-skill assessment. Chart 10 shows the effect of the 6+1 Traits writing intervention on students' Sentence Structure sub-skills. The vertical axis represents the mean percentage point difference between the SY 2008-2009 Quarter IV assessment and the SY 2010-2011 Quarter IV assessment. The horizontal axis represents students' grade levels; while the inset in the upper right corner color codes the school year along the horizontal axis. Asterisks, if any, visually denote the size of percentage differences. The source of the data in Chart 10 is the DoDEA HQ and the GA/AL TN 3 databases.

Illustrating the effect of the 6+1 Traits writing intervention, the data reveals a general and positive increase in the percentage of students that master Sentence Structure skills. That is, between the baseline SY 2008-2009 and the SY 2010-2011 the percentage of Grade 3students that mastered Sentence Structure skills underwent a small increase; that of Grade 4 students underwent a fairly large increase; that of Grade 5 students underwent a fairly large increase; while that of Grade 6 students underwent a large increase. These data strongly suggests that the 6+1 Traits intervention is highly effective for increasing students' sentence structure skills across the range of grade levels.

Maxwell AFB Elementary Terra Nova, 2nd Edition 2005-2008
Objectives Performance Index (OPI)* - Language – Editing Skills

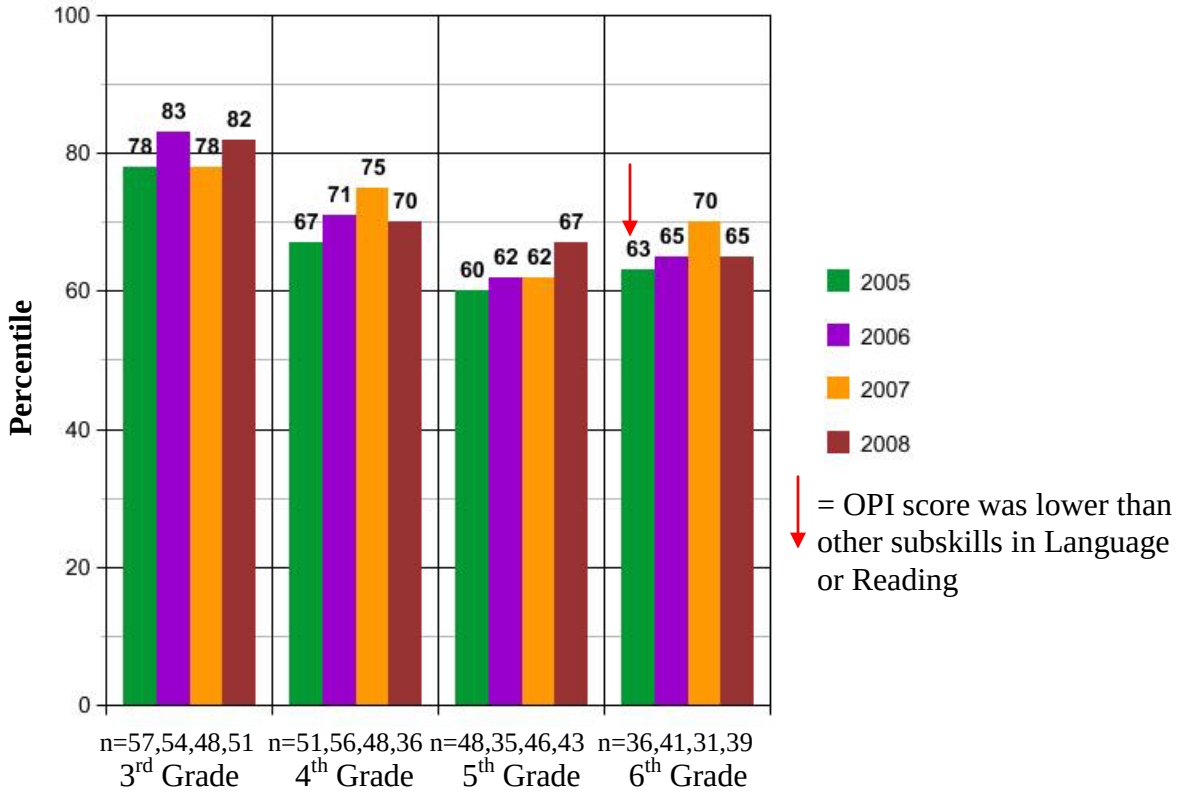


Chart 11

Findings: Chart 11 illustrates the OPI scores for grades 3-6 on the Terra Nova, 2nd Edition for the Editing Skills objective in the content area of Language over a 4-year period. Baseline year for this assessment is 2005.

Analysis: Chart 11 indicates an increase in scores for grades 3 through 6 over the 4-year period. The chart indicates lower scores in grades 5 and 6 when compared to grades 3 and 4.
The Editing Skills objective scores for grades 5 and 6 were consistently lower than the other objectives in the Language content area. Chart 8 indicates scores that are inconsistent from year to year; however these scores show a gain within each grade level from the baseline year to 2008.

Percentage of Maxwell Elementary School Students Mastering the TN 3 "Editing Skills" Language Sub-Skill by Grade Level and School Year

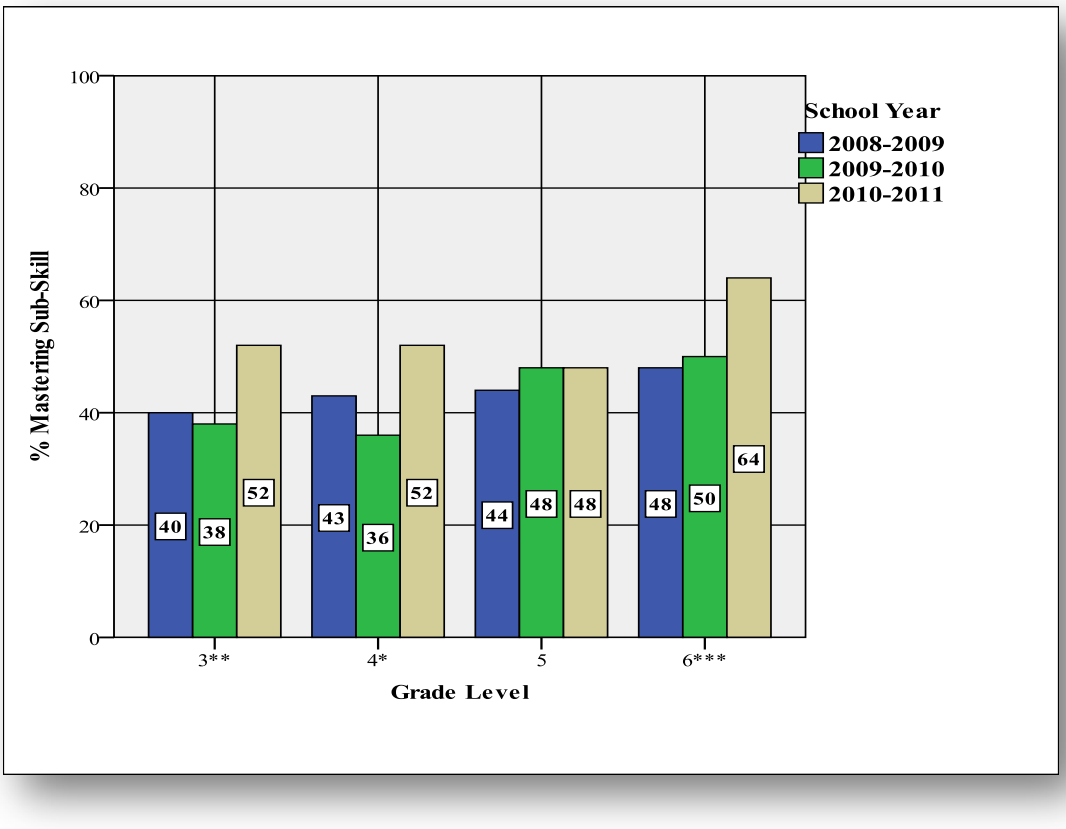


Chart 12

TN 3 OPI Editing Skills sub-skill assessment. Chart 12 shows data from the system-wide TN 3 OPI Editing Skills sub-skill assessment. The horizontal axis represents students' grade levels; while the inset in the upper right corner color codes the school year along the horizontal axis. Asterisks, if any, visually denote the size of percentage differences. The source of the data in Chart 12 is the DoDEA HQ and the GA/AL TN 3 databases.

Illustrating the extent of change in Grades K-3 students' writing communication skills over time, the data reveals that the difference between the baseline SY 2008-2009 and the SY 2010-2011 percentages for Grade 3 describes a moderate increase; that for Grade 4 a small increase; that for Grade 6 a fairly large increase; while that for Grade 5 is not substantial.

Just as in the preceding Chart 9 and Chart 10, these data strongly suggests that the 6+1 Traits intervention is highly effective for increasing grade 3-6 students' strategic writing skills, Grade 5 notwithstanding.

Maxwell AFB Elementary
End of Year Writing Assessment 2007-2009

In May, all students are given a writing prompt specific to each grade level. The end of year prompt is identical to the beginning of the year prompt. Teachers collaboratively score this assessment by using a rubric, and then report the number of students in each quartile.

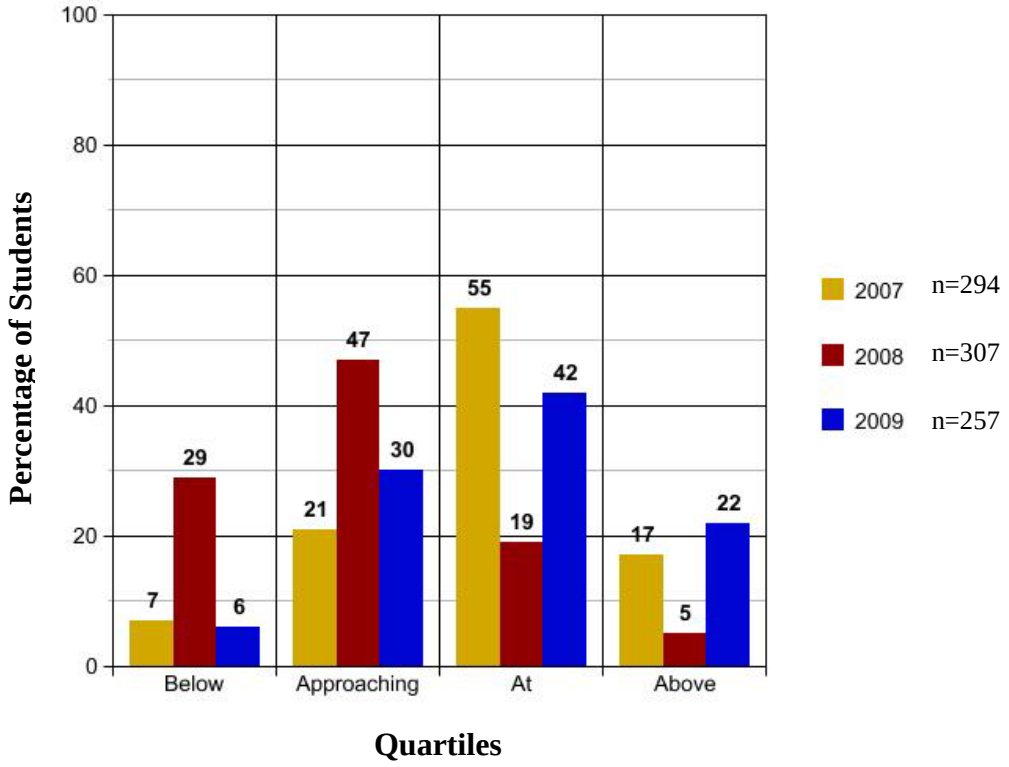
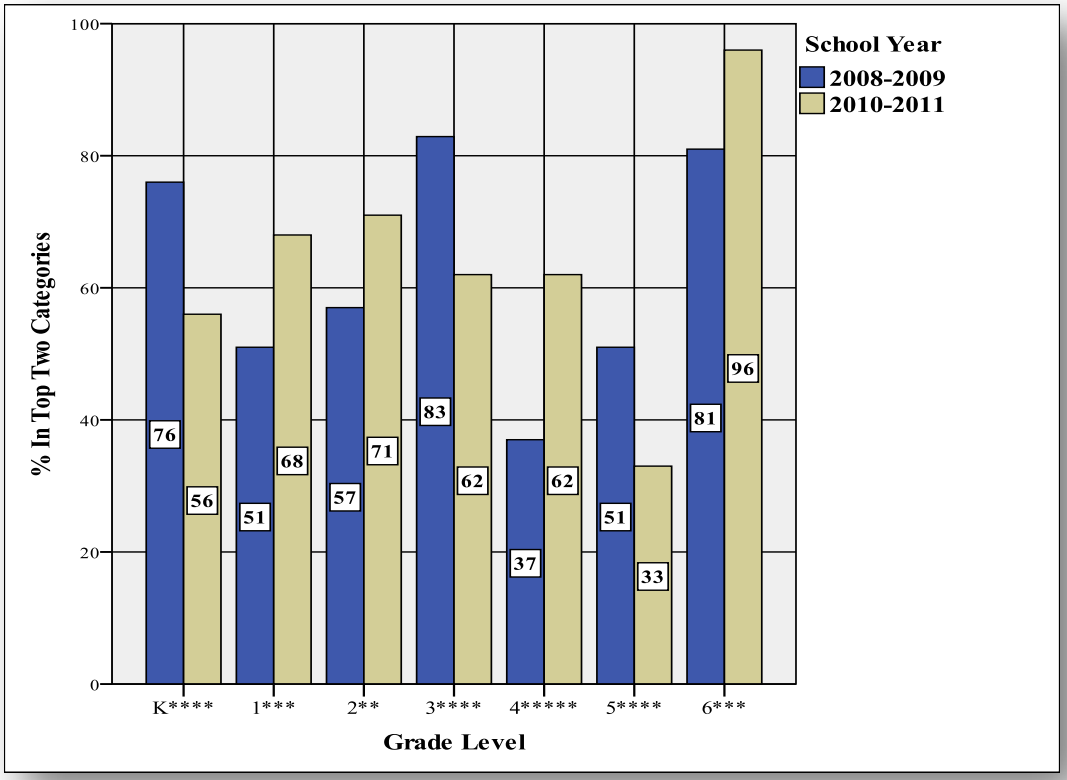


Chart 12

Findings: Chart 12 shows the percentage of all students scoring at the "Below", "Approaching", "At", and "Above" levels on the End of Year Writing Assessment over a 3-year period. Baseline year for this assessment is 2007.

Analysis: Chart 12 indicates an increase in the percentage of students scoring at the "Below" or "Approaching" levels over the 3-year period, thus indicating a decrease of students scoring at the "At" or "Above" levels. Chart 9 indicates that 76 percent of students were in the bottom two quartiles in 2008.

Percentage of Students in the Top Two Categories of Maxwell Elementary School's 6+1 Rubric Writing Assessment by Grade Level and School Year: Quarter IV Scores



N=294

Chart 13

Maxwell 6+1 Traits Rubric Writing Assessment. Chart 13 shows data from the locally created and administered Maxwell Elementary School 6+1 Rubric Writing Assessment. The horizontal axis represents students' grade levels; while the inset in the upper right corner color codes the school year along the horizontal axis. Asterisks, if any, visually denote the size of percentage differences. The source of the data in Chart 13 is the Maxwell Elementary School's T-Drive assessment database.

Illustrating the effects of the 6+1 Traits writing intervention, the Chart 13 data are mixed. Although each grade level underwent substantial change, some grades underwent negative change, while others underwent positive change. More specifically, between the baseline SY 2008-2009 Quarter I to Quarter IV and the SY 2010-2011 Quarter I to Quarter IV the percentage of Grade K students in the local assessment's top two categories underwent a large decrease; the percentage of Grade 3 students underwent a large decrease; while that of Grade 5 students underwent a large decrease. Meanwhile, the percentage of Grade 1 students underwent a fairly large increase; that of Grade 2 students underwent a moderate increase; that of Grade 4 students, a very large increase, and that of Grade 6 students underwent

a moderate increase. These data strongly suggests that the 6+1 Traits intervention is differentially effective for increasing the written communication skills of lower and upper elementary school students.

Implications for Writing Data (Charts 6-13) -

If Maxwell's written communication intervention is effective, the summary of Goal 1 findings will evince a pattern of meaningful positive change within the grade levels and between the various assessments. Table 1.0 below summarizes the magnitude and direction of change in student performance on each of the assessments that Maxwell's CSIT uses to define students' emerging written communication skills. The summary seeks to 1) identify the pattern that describes the magnitude and direction of change and 2) determine whether the impact of intervention is both meaningful and positive.

This summary finds that the predominant pattern in Table 1.0 is that nearly a three-fourths majority (70%) of the cells indicates the substantial positive change pattern which the summary expects when intervention is effective. Meanwhile, the larger minority (15%) of the cells show the neutral or no change pattern; while the smaller minority (10%) of the cells shows the pattern of negative change. Given the "weight of the evidence," this summary accepts that Maxwell's 6+1 Traits intervention is generally effective. Successfully producing positive change across a variety of grade levels and types of assessments, the 6+1 intervention appears generally effective, although its effectiveness is greatest for Grade 3, Grade 4, and Grade 6 and slightly less for Grade 5 students.

As the lower grades K to 2 have only the evidence from a single assessment, it is difficult to draw strong conclusions about the effectiveness of intervention at the lower grades. Tentatively, the 6+1 Traits intervention appears effective for Grade 1 and Grade 2 but perhaps not for Grade K.

Table 1.0: Summary of the Magnitude and Direction of Intervention Effects on Increasing Maxwell Elementary School Students' Written Communication Skills

School Goal 1: By June 2011 Maxwell Elementary students will increase NCE by 2 points as measured by Terra Nova in each of the OPI objectives of sentence structure, writing strategies, and editing skills to be administered in March 2011.

Goal 1 Assessment	Grade 3	Grade 4	Grade 5	Grade 6
1. TN 3 Language Content Test: NCE Scores	Exceeds 2-point Criterion	Exceeds 2-point Criterion*	Did Not Exceed 2-point Criterion	Exceeds 2-point Criterion*
2. TN 3 OPI Sentence Structure	Small Increase	Fairly Large Increase	Fairly Large Increase	Large Increase
3. TN 3 OPI Writing Strategies	Moderate Increase	Small Increase	Large Increase	Moderate Increase
4. TN 3 Editing Skills	Moderate Increase	Small Increase	None	Fairly Large Increase
5. Maxwell 6+1 Traits Writing Assessment	Large Decrease	Very Large Increase	Large Decrease	Fairly Large Increase

*The SY 2010-2011 percentage exceeds the 75% DoDEA Standard

Goal 1 Assessment (cont.)	Grade K	Grade 1	Grade 2
6. Maxwell 6+1 Traits Writing Assessment	Large Decrease	Fairly Large Increase	Moderate Increase

Note: The codes for interpreting percentage point differences are in Appendix 3.0, p. 24:

Maxwell AFB Elementary Terra Nova, 2nd Edition 2005-2008
50th Percentile (Median) Normal Curve Equivalent (NCE)* - Math

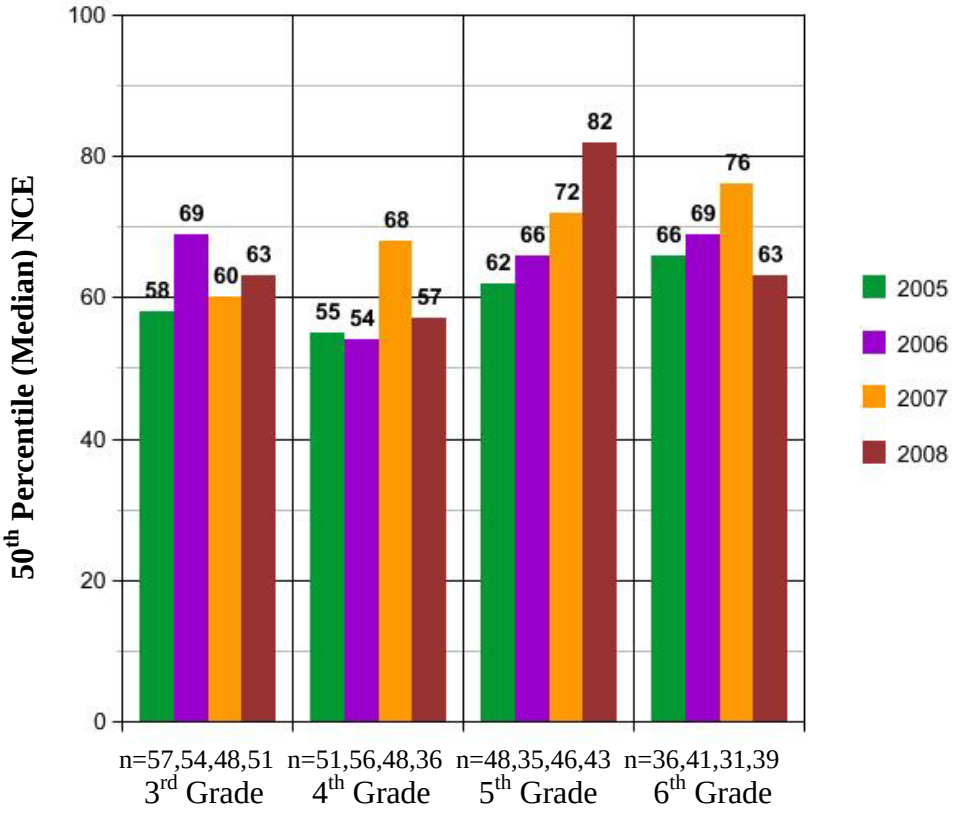


Chart 14

Findings: Chart 14 illustrates the 50th percentile (Median) NCE for grades 3-6 on the Terra Nova, 2nd Edition in the content area of Math over a 4-year period. Baseline year for this assessment is 2005.

Analysis: Chart 14 indicates an increase in grades 3 and 4 over the 4-year period, however from year to these scores are inconsistent. Chart 10 indicates a steady increase in scores in grade 5. The scores for grade 6 showed a steady increase from 2005-2007; however these scores decreased in 2008.

Changes in Maxwell Elementary School Students' TN 3 Mathematics NCE Scores by Grade Level and School Year

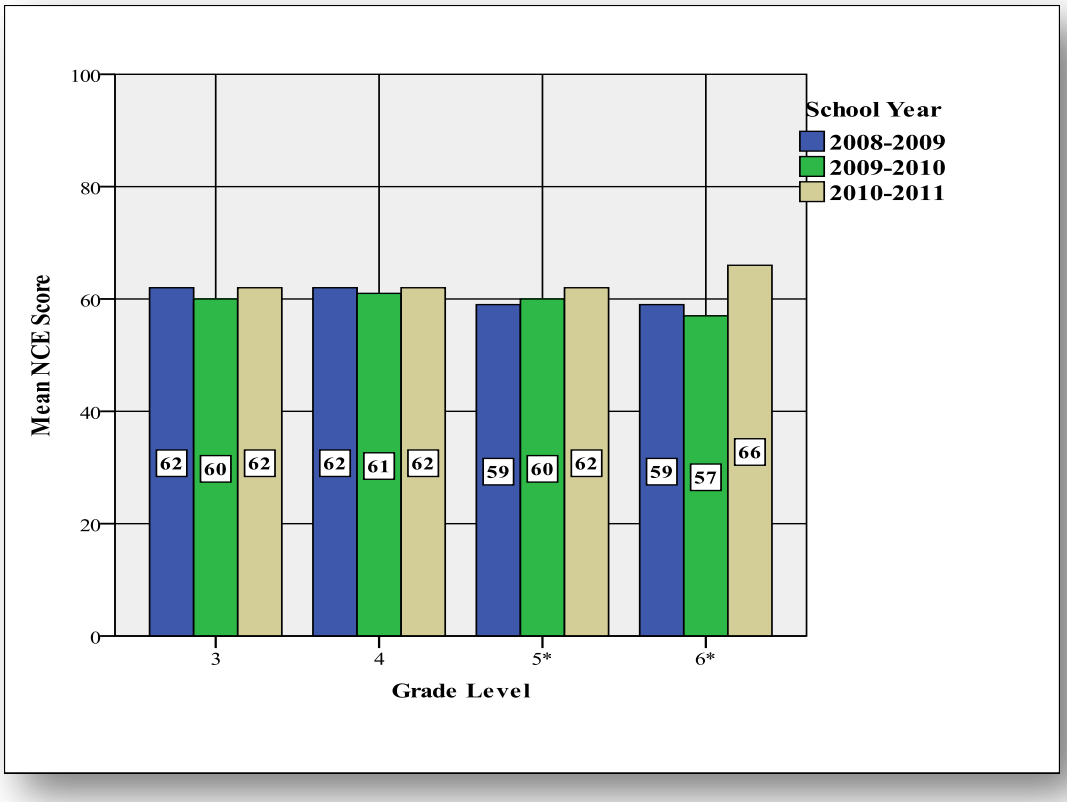


Chart 15

Goal 2 calls for measuring the growth of NCE scores to assess the effectiveness of the problem solving intervention. Maxwell's CSIT set its effectiveness criterion as a 2-point increase in TN 3 Mathematics content test NCE scores.

Chart 15 shows data from the TN 3 Mathematics content test. The vertical axis represents the number of NCE points; the horizontal axis represents students' grade levels; while the inset in the upper right corner color codes the school year along the horizontal axis. Asterisks, if any, visually denote whether the two-point criterion has been met or exceeded. Please note that the source for Chart 15 data is the DoDEA HQ and the GA/AL TN 3 databases.

Illuminating the growth of NCE scores, Chart 15 reveals that, from SY 2008-2009 to SY 2010-2011, the problem solving intervention showed limited effectiveness. That is, Grade 5 and Grade 6 students' NCE scores grew in excess of Maxwell's two-point growth criterion, while that of Grade 3 and Grade 4 students did not change.

Maxwell AFB Elementary Terra Nova, 2nd Edition 2005-2008
Objectives Performance Index (OPI)* - Math – Problem Solving

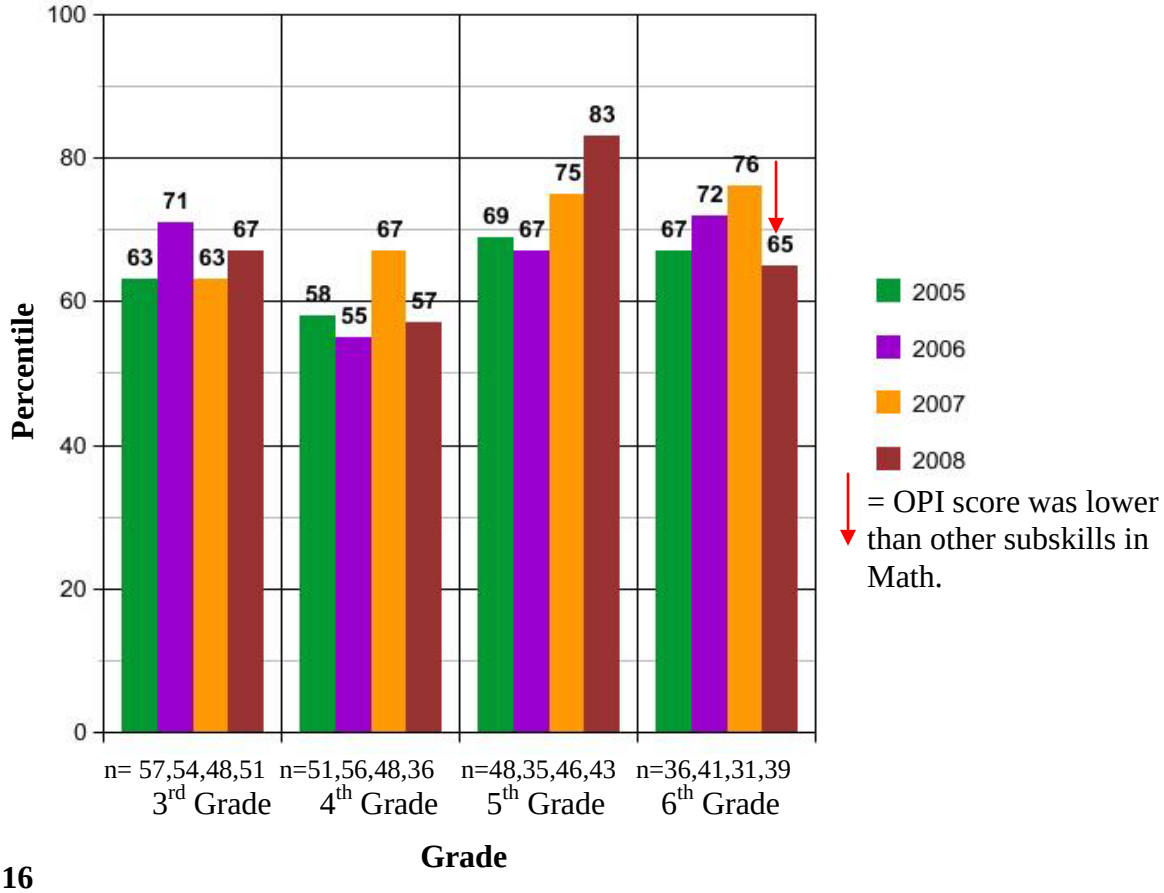


Chart 16

Findings: Chart 16 illustrates the OPI scores for grades 3-6 on the Terra Nova, 2nd Edition for the Problem Solving objective in the content area of Math over a 4-year period. Baseline year for this assessment is 2005.

Analysis: Chart 16indicates an increase in scores for grades 3 and 5 over the 4-year period. The chart indicates a decrease in scores in grades 4 and 6.

Percentage of Maxwell Elementary School Students Mastering the TN 3 OPI 17: Mathematics Problem Solving and Reasoning Sub-Skill by Grade Level and School Year

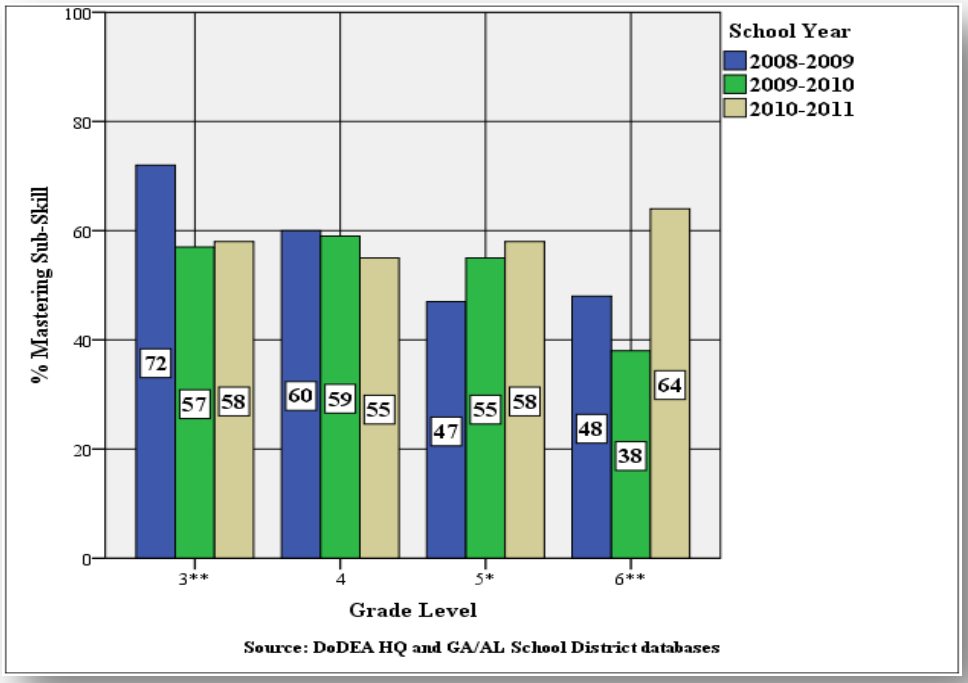


Chart 17

Chart 17 shows data from the TN 3 OPI Problem Solving and Reasoning sub-scale. The vertical axis represents the percentage of Maxwell students in the High Mastery category; the horizontal axis represents students' grade levels; while the inset in the upper right corner color codes the school year along the horizontal axis. Asterisks, if any, visually denote the size of percentage differences. The source of the data in Chart 17 is the DoDEA HQ and the GA/AL TN 3 databases.

Illustrating the differences between baseline and current percentages, the data reveals that, from SY 2008-2009 to SY 2010-2011, the percentage of Grade 3 students that achieved high mastery of the problem solving and reasoning sub-skill underwent a moderate decrease, while that of Grade 5 students underwent a small but substantial increase, and that of Grade 6 students underwent a moderate increase. Meanwhile, over the same time period, the percentage of Grade 4 students that achieved high mastery did not substantially change.

The graphic data shows that the intervention produced substantial positive change at the Grade 5 and Grade 6 levels but not at the Grade 3 and 4 levels where positive change is not evident. At the Grade 5 level, the intervention is effecting meaningful positive change; such that, the odds for a 5th grade student of achieving the "High Mastery" category during SY 2010-2011 are 56% greater compared to that of a 5th grade student during SY 2008-2009, while these odds for a Grade 6 student, over the same time period, are 92% greater.

In stark contrast to that of Grade 5 and Grade 6, the odds for a 3th grade student of achieving the "High Mastery" category during SY 2010-2011 are 86% less compared to that of a 3th grade student during SY 2008-2009. Meanwhile, these odds for a 4th grade student did not substantially change.

Maxwell AFB Elementary Terra Nova, 2nd Edition 2005-2008
Objectives Performance Index (OPI)* - Math – Communication

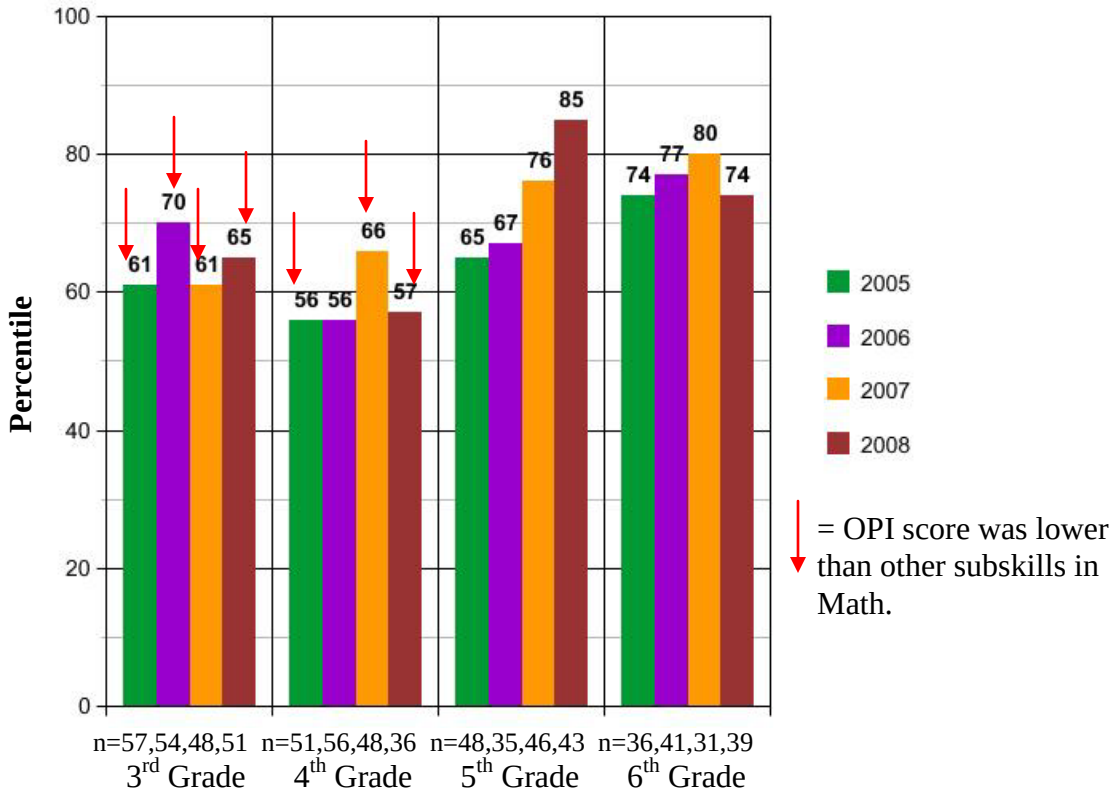


Chart 18

Findings: Chart 18 illustrates the OPI scores for grades 3-6 on the Terra Nova, 2nd Edition for the Communication objective in the content area of Math over a 4-year period. Baseline year for this assessment is 2005.

Analysis: Chart 18 indicates inconsistent scores in grade 3 with an overall increase over the 4 year period. In grade 4 scores are consistent with the exception of 2007. Chart 16 indicates a steady increase in scores in grade 5. In grade 6 scores increased from 2005-2007, however decreased equivalent to the 2005 baseline percentile.

Maxwell AFB Elementary Terra Nova, 3rd Edition 2009-2011
Objectives Performance Index (OPI)* - Math – Communication

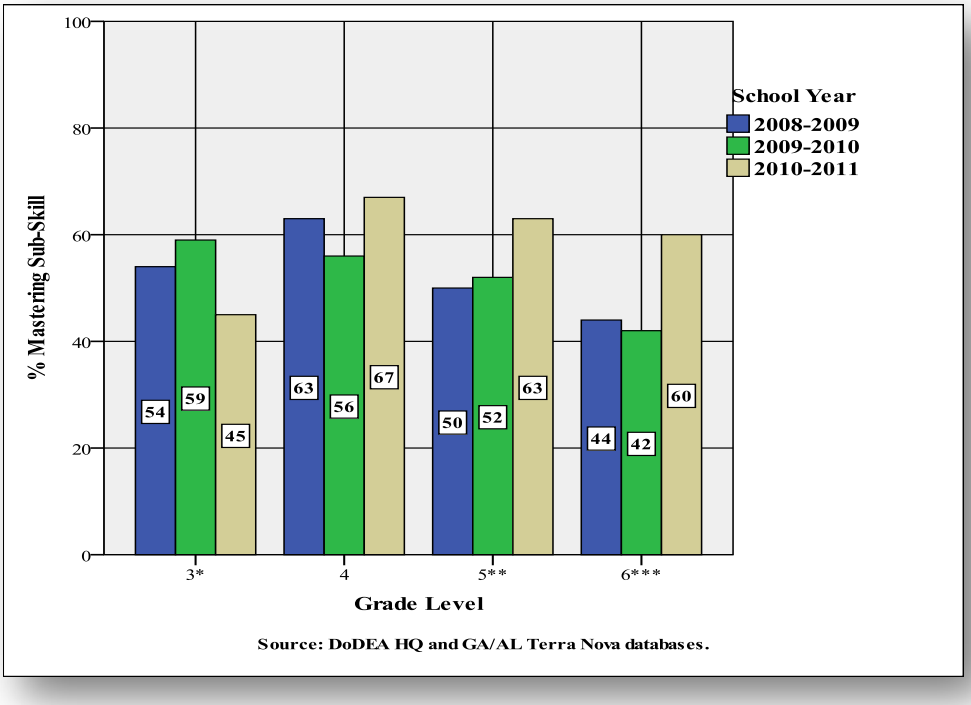


Chart 19

Chart 19 shows data from the TN 3 OPI 18: Math Communication sub-skill assessment. The vertical axis represents the percentage of Maxwell students in the High Mastery category; the horizontal axis represents students' grade levels; while the inset in the upper right corner color codes the school year along the horizontal axis. Asterisks, if any, visually denote the size of percentage differences. The source of the data in Chart 19 is the DoDEA HQ and the GA/AL TN 3 databases.

Illustrating the differences between baseline and current percentages, the data reveals that, from SY 2008-2009 to SY 2010-2011, the percentage of Grade 3 students that achieved high mastery of the problem solving and reasoning sub-skill underwent a small but substantial decrease, while that of Grade 5 students underwent a moderate increase, and that of Grade 6 students underwent a fairly large increase. Meanwhile, over the same time period, the percentage of Grade 4 students that achieved high mastery of the math communication sub-skill did not substantially change.

The figural data show that the intervention produced substantial positive change at the Grade 5 and Grade 6 levels but not at the Grade 3 and 4 levels where positive change is absent. At the Grade 5 level, the odds for a 5th grade student of achieving the "High Mastery" category during SY 2010-2011 are 70% greater compared to that of a 5th grade student during SY 2008-2009, while these odds for a Grade 6 student, over the same time period, are 90% greater.

In stark contrast to that of Grade 5 and Grade 6, the odds for a 3th grade student of achieving the "High Mastery" category during SY 2010-2011 are 43% less compared to that of a 3th grade student during SY 2008-2009. Meanwhile, as in the former analysis, those of a 4th grade student did not change.

Maxwell AFB Elementary
End of Year Math Assessment
2007-2009

The end of year math assessment, located in the teacher assessment book, is given as a pre and posttest, and is specific to each grade level.

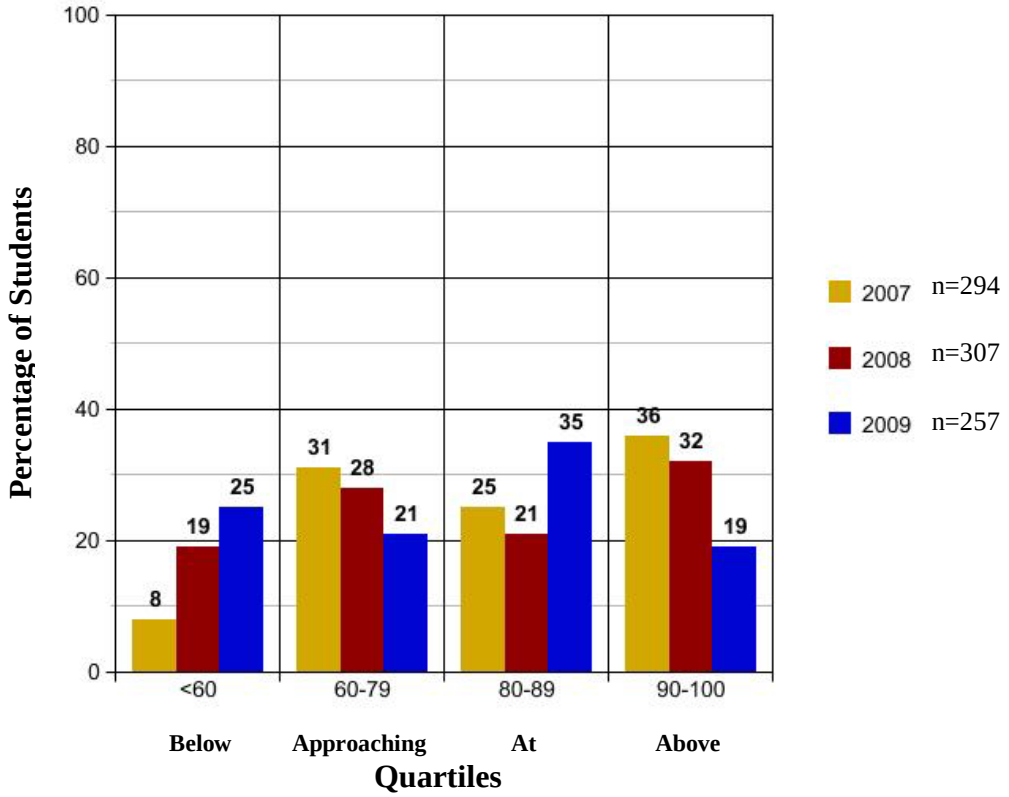


Chart 20

Findings: Chart 20 illustrates the percentage of all students scoring in each quartile over a 3 year period. Baseline year for this assessment is 2007.

Analysis: Chart 20 indicates an increase in the percentage of students scoring in the bottom quartile during the 3-year period. The scores in each quartile show an inconsistent growth pattern.

Maxwell AFB Elementary
Problem Solving Assessment - Posttest Scores
2007 & 2008

Students in grades 4-6 were given a problem solving assessment. The assessment was given as a pre and post test. The assessment was scored by the classroom teachers and the math facilitator.

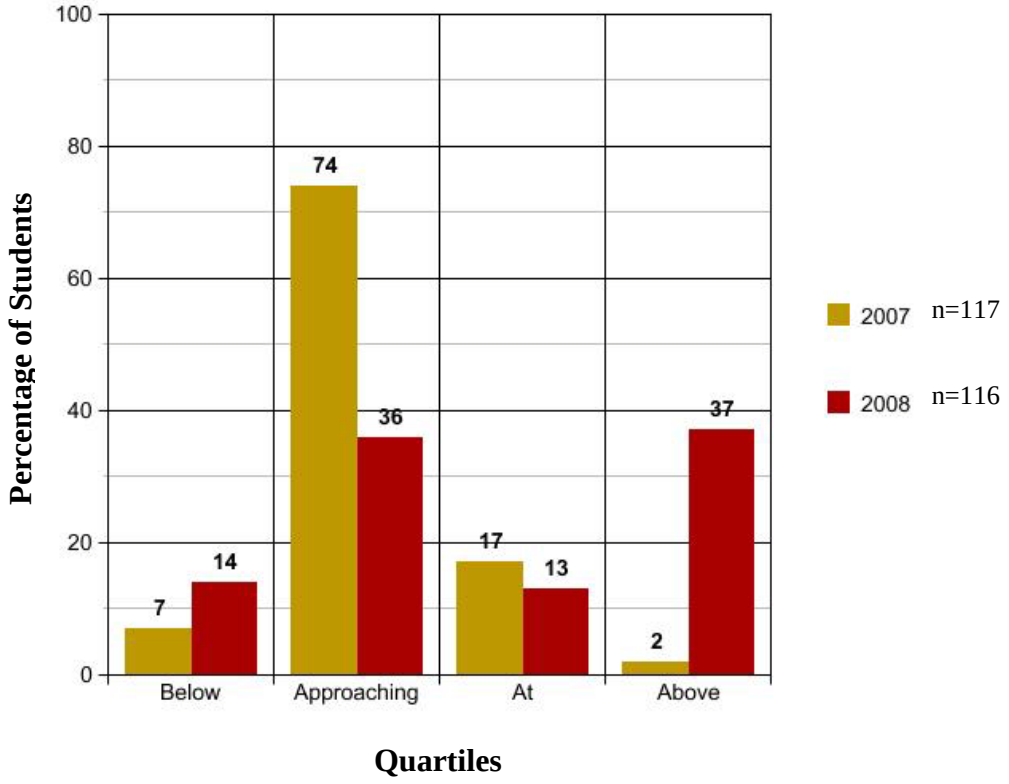


Chart 21

Findings: Chart 21 illustrates the percentage of students scoring in each quartile on the Problem Solving Assessment Posttest over a 2 year period. Baseline year for this assessment is 2007. A 5 point rubric was used for this assessment. A score of 0 or 1 placed the student in the bottom quartile.

Analysis: Chart 21 indicates an increase in the percentage of students scoring in the "Below" or bottom quartile. Chart 21 shows a increase (19% to 50%) in the percentage of students scoring in the "At" or "Above" quartiles. In 2008, the percentage of the students (50%) in the top and bottom 2 quartiles were identical, thus indicating that 1/2 of the students did not reach the standard or expectation for learning.

Percentage of Students Performing in the Top Two Categories of the Maxwell Elementary School's Math Exemplars: Grade-Level Problem Solving Assessment

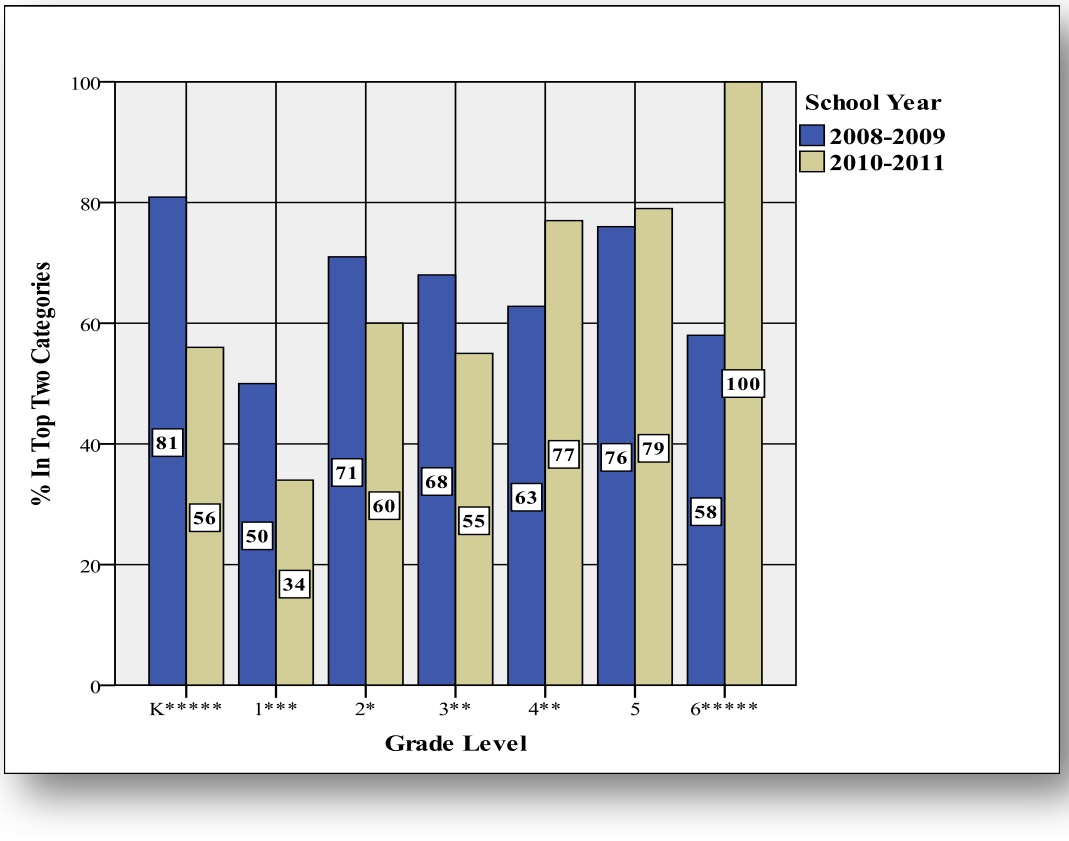


Chart 22

Chart 22 shows the results of the SY 2009-2010 and SY 2010-2011 Quarter IV local mathematics problem solving exemplars assessment. The vertical axis represents the mean percentage point difference between the SY 2009-2010 Quarter IV assessment and the SY 2010-2011 Quarter IV assessment. The horizontal axis represents the K-6 grade levels, while the inset shows the color coded values of the School Year factor along the horizontal axis.

Illustrating the size and direction of change in students' problem solving skills, the data reveals that the problem solving intervention has differential effects that tend to break down according to grade level. That is, the lower grades show a pattern of substantially negative effects, while the upper grades show a pattern of substantially positive effects.

More specifically, between the baseline SY 2008-2009 Quarter I to Quarter IV and the SY 2010-2011 Quarter I to Quarter IV the percentage of Grade K students in the local assessment's top two categories underwent a very large decrease; the percentage of Grade 1 students underwent a fairly large decrease; that of Grade 2 students underwent a small decrease; while that of Grade 3 students underwent a moderate decrease. Meanwhile, the percentage of Grade 4 students underwent a moderate increase; that of Grade 5

students underwent a numerical increase that is not substantial; while that of Grade 6 students underwent a very large increase, notably reaching 100% in the assessment's top two categories. These data strongly suggests that the 4 Steps to Problem Solving intervention is differentially effective for increasing the Math problem solving skills of lower and upper elementary school students.

Implications for Math Data (Charts 13-22)

If Maxwell's problem solving intervention is effective, the summary of Goal 2 findings will show a pattern of meaningful positive change within the grade levels and between the various assessments. Table 2.0 below summarizes the magnitude and direction of change in student performance on each of the assessments that the CSIT uses to define students' emerging capacity to solve mathematical problems. The summary of Goal 2 findings seeks to 1) identify the pattern that describes the magnitude and direction of change in students' capacity to solve mathematical problems and 2) determine whether the impact of intervention is both meaningful and positive.

Table 2.0: Summary of the Magnitude and Direction of Intervention Effects on Increasing Maxwell Elementary School Students' Problem Solving and Reasoning Skills

School Goal 2: All students will improve mathematical problem solving

Goal 2 Assessment	Grade 3	Grade 4	Grade 5	Grade 6
1. TN 3 Mathematics Content Test: NCE Scores	None	None*	Exceeds 2-Point Criterion	Exceeds 2-Point Criterion*
2. TN 3 OPI 17: Problem Solving and Reasoning	Moderate Decrease	None	Small Increase	Moderate Increase
3. TN 3 OPI 18: Communication	Small Decrease	None	Moderate Increase	Fairly Large Increase
4. Math Exemplars: Grade Level Problem Solving	Moderate Decrease	Moderate Increase	None	Very Large Increase
5.				

*SY 2010-2011 percentage in top two quarters exceeds the 75% DoDEA Standard

Goal 2 Assessment (cont.)	Grade PreK	Grade K	Grade 1	Grade 2
6. Math Exemplars: Grade Level Problem Solving	N/A	Very Large Decrease	Fairly Large Decrease	Small Decrease

Note: Refer to Appendix 3.0 (p. 24) for the codes for describing percentage differences.

The analysis finds that only 42% of the cells in Table 2.0 above indicate substantial positive change. However, the predominant pattern is that the instances of substantial positive change, which the summary expects when intervention is effective, are clustered at the Grade 5 and Grade 6 levels. That is, of the

eight instances of substantial positive change, seven (88%) are shared between Grade 5 and Grade 6. Of the seven instances of negative change, all (100%) are shared between Grades K-3; and of the five instances of no change, three (60%) are within Grade 4. The data clearly show that, although the problem solving intervention is showing progress, its effectiveness is not widespread but limited to Grade 5 and Grade 6.

Instructional Data

The following is data from the Maxwell Instructional Survey 2009. The CSI Leadership Team sent the survey to teachers using www.surveymonkey.com in September 2009. The total number of responses is 21. This section of the survey examines the various instructional models and strategies used in the classroom and how often they are used. Teachers were asked to rate themselves on a Likert scale of 1-5 (5 being the highest) on the following categories. Teachers were to identify how comfortable they were teaching each category as well as how often they used each category.

From a scale of 1-5 (5 being the highest) how comfortable are you with using the following instructional models?

Table 1

n=21 Scores indicated as a percentage	Lecture	Whole Group	Small Group	Cooperative Group	Project-Based Learning	Independent Study	Peer Tutoring	Learning Centers	Guided Practice	Questions and Inquiry	Integrated Learning	Co-Teaching
Highly Comfortable	**20**	**33**	**48**	**25**	**15**	**10**	**10**	**38**	**14**	**23**	**28**	**14**
Very Comfortable	**25**	**24**	**29**	**35**	**30**	**10**	**29**	**10**	**42**	**29**	**29**	**38**
Comfortable	**20**	**29**	**14**	**40**	**25**	**35**	**29**	**48**	**33**	**43**	**29**	**29**
Moderately Comfortable	**15**	**15**	**10**	**0**	**20**	**30**	**19**	**0**	**5**	**5**	**10**	**10**
Not Comfortable	**20**	**0**	**0**	**0**	**10**	**15**	**14**	**5**	**5**	**0**	**5**	**9**

How often do you use the following instructional models?

Table 2

n=21 Scores indicated as a percentage	Lecture	Whole Group	Small Group	Cooperative Group	Project-Based Learning	Independent Study	Peer Tutoring	Learning Centers	Guided Practice	Questions and Inquiry	Integrated Learning	Co-Teaching
Daily	**37**	**80**	**71**	**28**	**10**	**5**	**25**	**30**	**25**	**40**	**38**	**10**
Weekly	**21**	**20**	**24**	**56**	**25**	**26**	**40**	**35**	**60**	**30**	**48**	**30**
Monthly	**5**	**0**	**5**	**17**	**20**	**27**	**20**	**20**	**0**	**30**	**5**	**25**
Yearly	**0**	**0**	**0**	**0**	**20**	**16**	**0**	**5**	**0**	**0**	**0**	**0**
Never	**37**	**0**	**0**	**0**	**25**	**26**	**15**	**10**	**15**	**0**	**10**	**35**

Findings: Table 1 illustrates the percentage of teachers and how comfortable they are using the various instructional methods. Table 1 indicates that one hundred percent of teachers are comfortable with cooperative group instruction. Ninety five percent are comfortable with learning centers. Ninety percent of teachers are comfortable in small group instruction, as well as guided practice. Table 2 illustrates how often teachers use various instructional methods. Eighty percent of teachers use whole group instruction daily. Seventy one percent use small group instruction daily. The survey indicated that twenty five percent never use project based learning, however seventy five percent felt comfortable in using this instructional method

Analysis: The level of comfort does not appear to be consistent with instructional practice.

Implications: Based on the findings and analyses, professional development should be considered to help all teachers incorporate project based learning into their classroom**.**

Survey of Students

The following is data from the Maxwell Student Survey 2009. The Educational Technologist administered the survey using www.surveymonkey.com to all students in grades 2-6. The survey was completed during scheduled lab times in September 2009. The total number of responses is 158. Students responded to questions that pertained to academic achievement, a safe environment, and school partnerships.

In the academic achievement area, eighty seven percent of the students agree that someone at school is available to help them with school work. Ninety-one percent agree that the school is preparing them well for the next grade.

In the safe environment area, eighty five percent of the students believe that the school maintains good discipline. Eighty-nine percent feel safe at school. Less than thirteen percent ever feel unsafe in any specific location at school (bathrooms, playground, parking lot, bus, etc.). When asked if the school deals appropriately with students who bully, eighty four percent of the respondents agree. Over eighty of the students surveyed feel that discipline problems are handled quickly and fairly at Maxwell.

Two questions pertain to Home-School Partnership in which ninety one percent answered, yes; the school openly invites parents to participate in school-related events. The remaining ten percent answered that they didn't know, yet no one answered no. Sixty-three percent stated that the school communicates at least once a week with their parents

Survey of Parents

The following is data from the Maxwell Parent Survey 2009. Data was collected by using www.surveymonkey.com and placing a link on the school's website. The total number of responses is 61. Parents responded to questions that pertained to academic achievement, a safe environment, and school partnerships.

When asked to choose three areas the school should place emphasis, sixty seven percent stated reading comprehension, thirty four percent noted writing and seventy seven stated math reasoning and problem-solving. Other areas were less than twenty percent. Sixty-four percent feel that the school provides extra academic help when needed and eighty percent agree that the school is preparing their child well for the next grade.

Eighty-seven percent agree that the school maintains good discipline; seventy seven agree that discipline problems are handled quickly and eighty percent believe that problems are handled fairly. Overall, parents stated that their child feels safe or very safe at the school.

In the home-school partnership area, ninety-eight percent of the respondents feel welcome when they visit. Ninety five percent responded that the school communicates regularly through newsletters, phone calls and emails. Ninety-seven percent stated, yes that the school encourages parent involvement.

Customer Satisfaction Survey

The DoDEA Customer Satisfaction Survey is administered to teachers, parents, and students every three years. It was last administered in 2008-09. 44 students, or 45% of the sample, responded to the survey.
This survey info would be easier to see/read/understand in table format:
When asked what grade on a scale from A to F they would give public schools in the United States, 82% of Maxwell students gave the schools a grade of A or B. Sixty-six percent of the same students judged DoDEA schools as deserving of a grade of A or B.

Another section of the survey asked students to identify the biggest problems with which their schools must deal. Fourteen percent indentified bullying as being problematic; 11% noted the school lunch program as being a major problem. Thirteen percent of the responding parents identified the school lunch program as being problematic and 11% identified timely communication from teachers/administrators as a problem.

The survey indicated that 89% of parents gave the school a grade of A or B on how well the school is striving to form stronger partnerships with the parents and community.

It appears that a need to improve communication between teacher to parent and administrator to parent is a common thread throughout the survey. The table below is an action plan created to address the suggested improvements.

Background:

Results from the 2008-2009 DoDEA Customer Satisfaction Survey indicate one predominant trend at Maxwell AFB Elementary. Parents across the grade-level spectrum (Pre-K – 6th grade) indicated a need for improvement in school/home interaction and communication.

In order to address these concerns, the Maxwell AFB Elementary School Action Plan focuses on Goal 4 – Communication and Partnerships.

Goal: *To enhance student achievement through timely school-to-home communication, parental involvement opportunities, and community partnerships.*

Other Areas of Concern – There was one other area of concern from the 2009 CSS results for Maxwell AFB Elementary School.

Plan for More Parent/Teacher Participation – 45% of parents/sponsors and 45% of students completed the CSS for 2009. We would like to see an increase in the number of parents and students who respond to the survey. For next year, we plan to:

1) Enlist the support of the Base Newspaper (The Dispatch) in advertising the dates for the 2011 CSS.
2) Take the students to the computer lab and have them complete the survey at school.
3) Have a Customer Appreciation Week at school. We will invite parents in for a variety of activities to honor them throughout the week. The computer labs will be available for parents to take the survey at school during the week. Free homework passes will be given to parents who take the survey at school.
4) Reminders will go home through email and weekly communication to parents.
5) The Maxwell AFB Elementary School Website will publicize the dates of the survey.

A copy of the Customer Satisfaction Survey is available for review.

Environmental Scan

In August 2008, Maxwell kicked off its year with a 21st Century Learning professional development session with Beth Holmes, ISS GA/AL DDESS. Throughout the school year, the staff at Maxwell AFB Elementary reviewed the current environmental factors affecting our school and researched how future learning communities will be affected. This was accomplished through small group sessions, faculty meetings, and summaries of articles on Ms. Hayes' Morning Note. Our teachers need to be even greater than before, embracing technology and collaborating to keep up with the global movement of our families and innovations that affect learning. Successful communication requires reading and writing across various media and social platforms: social networking, virtual worlds, Wikis, digital videos. Infinite data outputs will require problem solving abilities and higher order thinking skills to discern usefulness and applications.

Resources

2006-2016 Map of Future Forces Affecting Education, (2006) Institute for the Future and KnowledgeWorks Foundation. Palo Alto, CA.

2020 Forecast: Creating the Future of Learning, (2008). KnowledgeWorks Foundation. Cincinnati, OH.

The Top Six Trends of the 21st Century, (2008). Retrieved from http://sbo.nn.k12.va.us/smartsafeschools/Top6Trends_21stCentury.pdf

Writing Now, A Policy Research Brief produced by the National Council of Teachers of English. (2008).

Cevenini, P. (2006). *Creating a '21st-century school' for learning and working together.* eSchool News, Technology News for Today's K-20 Educator. Retrieved from www.eschoolnews.com/news/top-news/news-by-subject/international/index.cfm?i=41342

Analysis of Data and Implications

The Maxwell AFB Elementary Staff analyzed the results of Terra Nova, 3rd Edition by Content Area (Reading, Language, and Math). Reading and Language scores were comparable with Reading being slightly lower, however further analyses revealed that students were consistently "At" or "Above" grade level expectations on the Developmental Reading Assessment (**DRA**) **and** on the Scholastic Reading Inventory (SRI).

Teachers analyzed the results of Terra Nova, 3rd Edition 2009-2010 by Objective Performance Index (OPI) scores for Reading, Math, and Language.

Teachers analyzed of the End of Year Writing Assessment, which indicated an increase of students scoring in the "Below" and "Approaching" quartiles from 2007-2008 and from 2010.

During August 2010 professional development session with the CSI Leadership Team the faculty and staff looked at data, and discussed a need to target the students' written communication skills for improvement. During this PD session and other grade level collaboration meetings, teachers in the lower grades discussed concerns regarding the number of students with in the writing process.

Under the Math content area, teachers analyzed OPI scores for Problem Solving and Communication were consistently lower than other subskills in the Math content area.

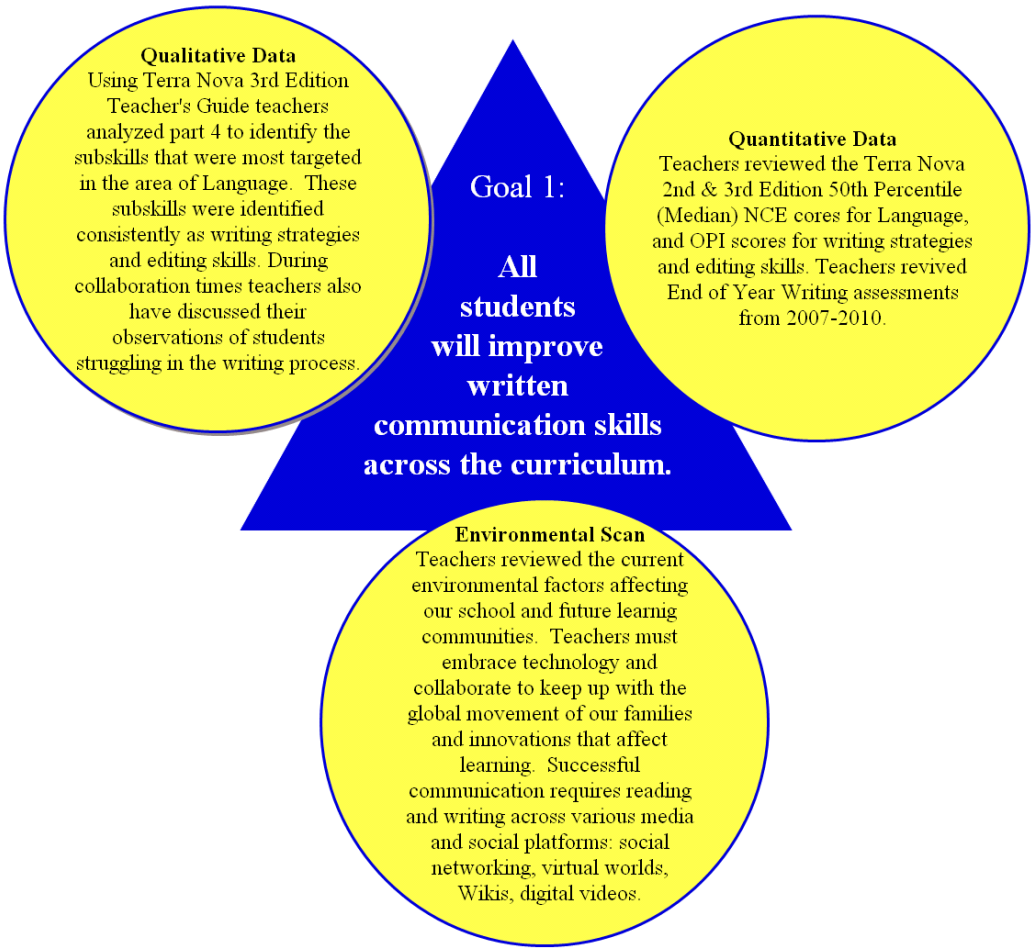
Carolyn Lewis, Math Facilitator, conducted a Problem Solving Assessment in 2007-2009. In 2007-2008, an analysis indicated an increase in students scoring in the bottom "Below" quartile.

When looking a different environmental factors affecting our school and future learning communities, teachers found that successful communication will require reading and writing across various media and social platforms: social networking, virtual worlds, Wikis, digital videos. Infinite data outputs will require problem solving abilities and higher order thinking skills to discern usefulness and applications.

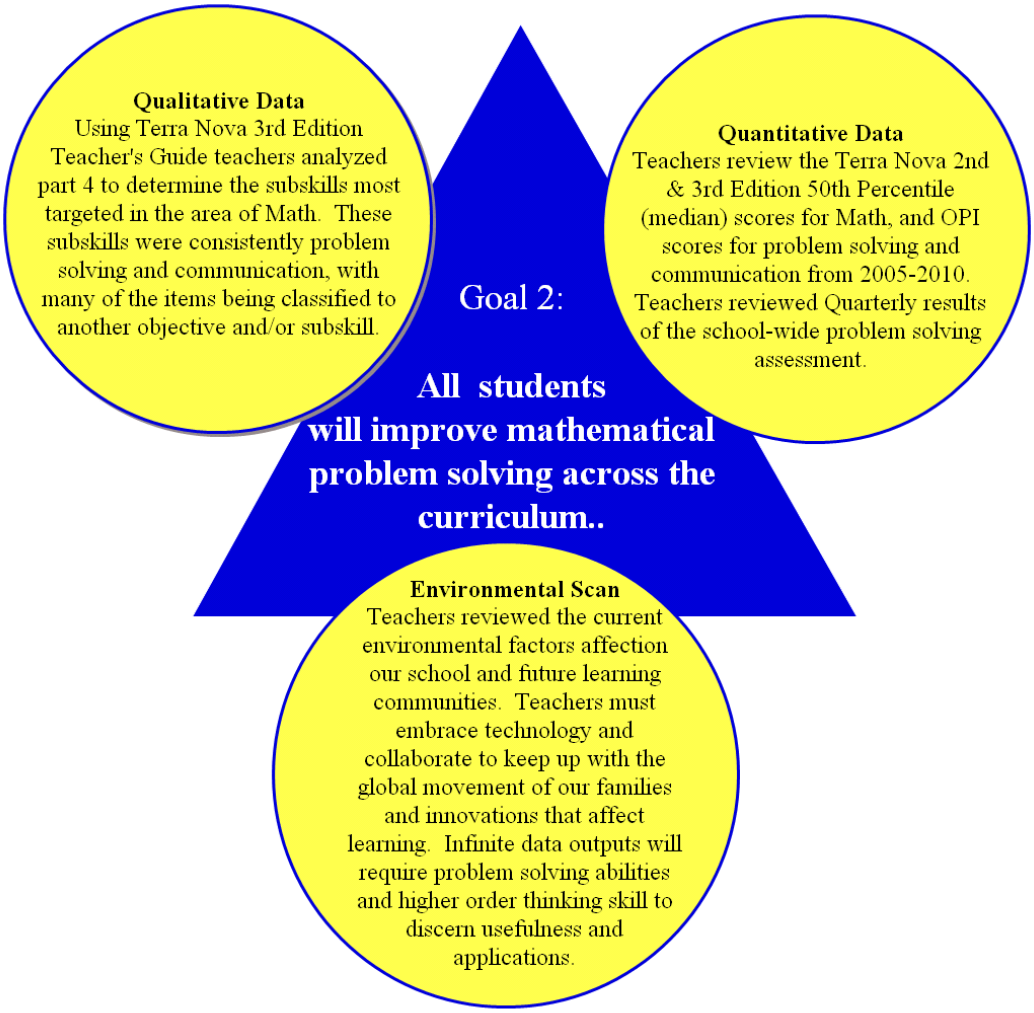
Implication – Based on these findings and the analyses we chose to target written communication skills, as well as mathematical problem solving strategies across the curriculum.

Triangulation of the Data

Goal 1



Goal 2


Qualitative Data
Using Terra Nova 3rd Edition Teacher's Guide teachers analyzed part 4 to determine the subskills most targeted in the area of Math. These subskills were consistently problem solving and communication, with many of the items being classified to another objective and/or subskill.
Quantitative Data
Teachers review the Terra Nova 2nd & 3rd Edition 50th Percentile (median) scores for Math, and OPI scores for problem solving and communication from 2005-2010. Teachers reviewed Quarterly results of the school-wide problem solving assessment.
Goal 2:
All students will improve mathematical problem solving across the curriculum..
Environmental Scan
Teachers reviewed the current environmental factors affection our school and future learning communities. Teachers must embrace technology and collaborate to keep up with the global movement of our families and innovations that affect learning. Infinite data outputs will require problem solving abilities and higher order thinking skill to discern usefulness and applications.