Department of Defense Education Activity
Domestic Dependent Elementary & Secondary Schools
North Carolina District

2010/2011 School Improvement Status Report

Pope Elementary School

Building 9000
Armistead Street
Ft. Bragg, NC 28307

Dr. Kim McBroom, *Principal*

EXECUTIVE SUMMARY

The Department of Defense Education Activity has a Community Strategic Plan (CSP) that requires its schools to ensure high student achievement. One of the goals, for example, in the CSP is to have 75% percent of students perform above the median on a system-wide, norm-referenced assessment. Thus, to pursue this academic goal and others, the CSP requires schools to use assessments to identify where student performance is low and then develop interventions containing instructional strategies that will increase student performance and help achieve these goals.

Consequently, Pope Elementary School, as part of pursuing its process of continuous school improvement, administers a number of standardized and local assessments to measure student academic performance across a variety of academic subjects. Additionally, Pope Elementary School routinely conducts an analysis of the results to identify where student performance is low and then to set outcome goals and devise strategies to meet those goals. The Pope School Profile analyzed assessment data and found that students performed less well in the areas of reading comprehension and math problem-solving skills compared to other academic areas.

Based on these findings derived from an analysis of these assessment data, Pope developed a School Improvement Plan that created two goals as a means to dedicate its resources and focus its teaching efforts toward improving student learning in several areas. Specifically, Goal l was to improve reading comprehension, and Goal 2 was to improve math problem-solving skills. Accordingly, Pope adopted several strategies to pursue these goals.

Therefore, to evaluate whether Pope achieved its goals and whether its interventions were effective, Pope conducted an analysis to measure the amount of change in student performance over time. The analysis, as reflected within this Continuous School Improvement Status Report, shows that Pope is partially meeting its school goals. More specifically, student performance increased in the area of reading comprehension in most grades on most assessments. Student performance in the area of math problem-solving skills had some increases but remained unchanged on some assessments for some grades.

To continue its effort to improve student performance in the area of reading comprehension & math problem solving Pope will continue to use its existing interventions but enhance the use of them by using more differentiated instruction.

Purpose

The purpose of a Status Report is to determine if a school is progressing toward meeting the goals contained in its Continuous School Improvement Plan. The Status Report evaluates whether student performance increased in those academic subjects where Pope Elementary School had found its students to be performing less well or below standard. For Pope, Goal l is to improve reading comprehension, and Goal 2 is to improve math problem-solving skills. As importantly, the Status Report evaluates the extent of change in student performance to help partially answer whether Pope's interventions were successful. The Status Report uses assessment data to measure the amount of change in student performance over time to evaluate the degree of goal attainment and the effectiveness of its interventions.

Methodology

To evaluate how well Pope is progressing toward meeting its Continuous School Improvement Plan goals, the Status Report contains a temporal analysis of student performance. The analysis uses student assessment data to compare student yearly performance after the school has adopted and implemented its instructional intervention. The aim of conducting an over-time or longitudinal analysis of student assessment scores is to determine if student academic performance is improving as Pope continues to implement its school interventions.

The analysis uses aggregate level data, for it compares the performance of groups of students rather than examining individual students. The analysis first groups students by various grade-levels. The report then creates grade-level measures comprised of student performance data drawn from various school-administered assessments that gauge those academic subjects where Pope sought to improve student performance. The aggregate or grade-level measure is the *percentage* of students within a grade falling within a performance category (e.g., students who achieved mastery) or above a performance threshold (e.g., students above a standard or the median of a comparison group).[1]

To discover whether there were increases in student achievement from 2009 to 2011, the analysis uses the aforementioned measures to compare student performance across assessment periods. To help show what temporal changes, if any, occurred in assessment scores, the Status Report displays data using tables and bar graphs. The horizontal axis of the graphs represents time; it divides time into periods by years. The same axis also displays the grouping factor, which is grade-level. For example, for Pope, the grade-level categories are PK-4. Thus, the graphs cluster the yearly bars together along the horizontal axis for each grade-level.

The vertical axis represents the percent as the summary, grade-level measure comprised of data from the particular assessment. Comparing a group's values (i.e., percentages) or the vertical heights of the bars across years from 2009 to 2011 reveals whether there were increases or decreases in student performance. For example, if 52% of the students fell in or above the "*at standard"* category in 2009 and 56% of students did in 2011, then there would be a 4-point increase in performance.[2] To measure changes in

[1] A "percentage" is not the same as a "percentile." The percentage measure, as applied here, is the percentage of students that fall within a performance category.

[2] The magnitude measure is not the percentage change between periods, which in this case would be 7.7% (i.e., 4% difference ÷ 52% baseline score).

student growth for each goal, the analysis provides a graph for each assessment and a very brief descriptive narrative of grade-level performance. However, to make a judgment about the magnitude of the change to gauge how well the school is progressing towards its goals, the results section also contains a table summarizing the amount of change for the assessments for each goal. The basis for characterizing the magnitude of change is the difference in percentage points between one year and the next. The following list presents a nomenclature and an accompanying point difference that characterize the magnitude of change.[3]

Small Change: 1-3 points
Medium Change: 4-7 points
Large Change: >7 points

Results

This section presents an analysis of student performance; it divides the material into several sub-sections. The first sub-section describes the school's goals stated in terms of student outcomes. Sub-section 2 identifies the instructional interventions the school used to increase student performance. The next section describes the particular assessments and measures that Pope used to uncover any sub-standard student performance and then later to develop its goals. Sub-Section 4 uses data from these assessments to judge how well the school is progressing toward its goals.

Goal #1. All students will improve reading comprehension skills in all curricular areas.

Instructional Intervention. Students will improve reading comprehension skills through differentiated instruction in reading.

Assessments and Measures. Pope used the below listed student assessments and measures to develop its school improvement goals. Consequently, the status report uses these same assessments to evaluate student performance between 2009 and 2011.

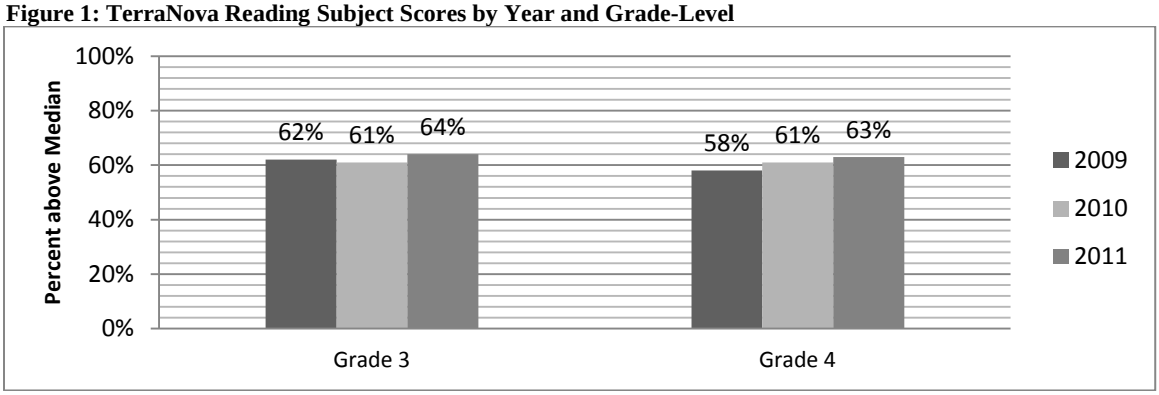
- Assessment #1: TerraNova 3rd Edition Multiple Assessment Reading Subject Test
  - *Measure: Percent above national median*
- Assessment #2: Reading Predictors
  - *Measure: Percent at or above standard*
- Assessment #3: Developmental Reading Assessment
  - *Measure: Percent at or above standard*
- Assessment #4: Scholastic Reading Inventory
  - *Measure: Percent at or above standard*

Data Analysis. The analysis uses the aforementioned assessments to measure the changes in student performance in reading comprehension by comparing the grade-level scores from the most recent, post-intervention assessment years. The analysis does so by displaying yearly student performance data in a set of bar graphs where each bar represents the percentage of students falling in or above a category for a particular year.

[3] A difference of a few points may not represent a real change in student performance because measurement error is associated with all assessment items. Measurement error means that the observed students' score may be different from and not capture the students' true score.

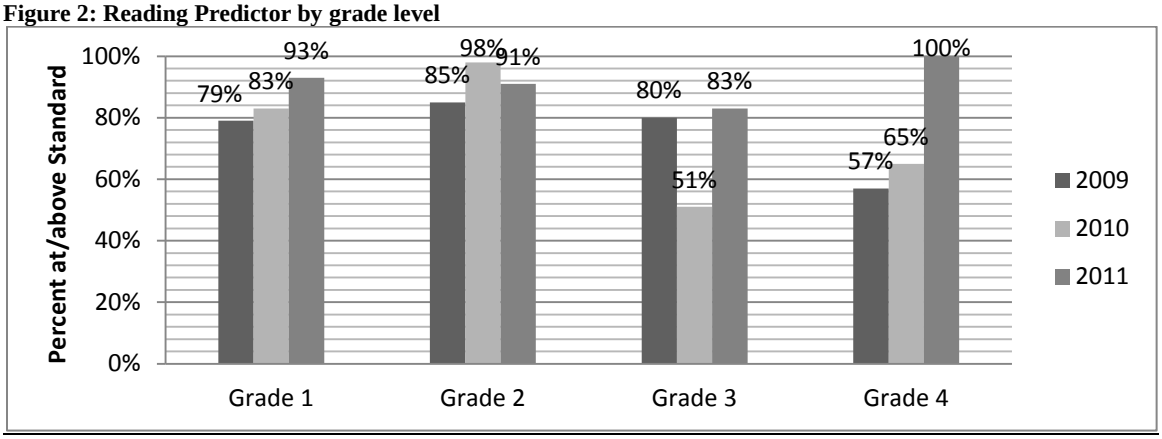
Assessment #1**.** Figure 1 shows data from the TerraNova 3rd Edition Multiple Assessment Reading Subject Test. The vertical axis represents the proportion of Pope students above the national median. The graph shows that student performance increased in both grades.

Figure 1: TerraNova Reading Subject Scores by Year and Grade-Level



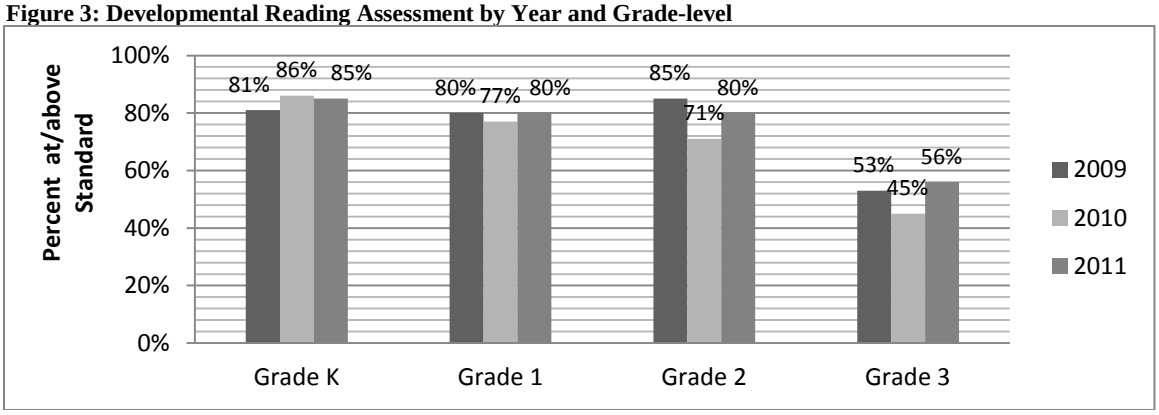
Assessment #2. Figure 2 shows data from Reading Predictors Assessment. The vertical axis represents the percentage of Pope students at or above standard. The graph shows that student performance increased in all four grades.

Figure 2: Reading Predictor by grade level



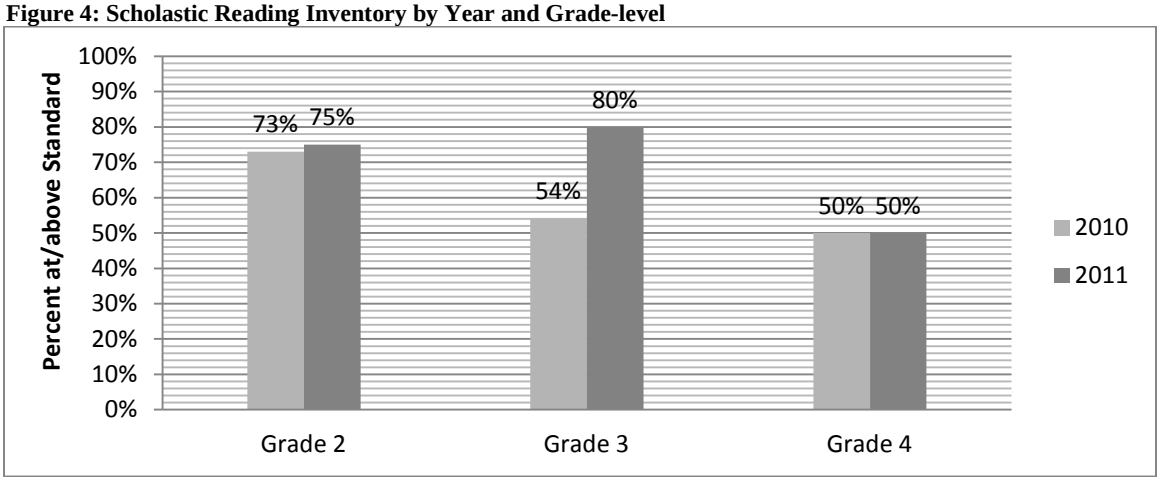
Assessment #3. Figure 3 shows data from the Developmental Reading Assessment. The vertical axis represents the percentage of Pope students at or above standard. The graph shows that student performance increased in Kindergarten and 3rd grade but remained unchanged in the 1st and dropped 2nd grade, respectively.

Figure 3: Developmental Reading Assessment by Year and Grade-level



Assessment #4. Figure 4 shows data from the Scholastic Reading Inventory Assessment for 2010 and 2011. The vertical axis represents the percentage of Pope students at or above standard. The graph shows that student performance increased in the 2nd and 3rd grades but was unchanged in the 4th grade.

Figure 4: Scholastic Reading Inventory by Year and Grade-level



Summary. Table 1 summarizes the above findings regarding the amount of change in student performance in the area of reading comprehension between 2009 and 2011. The data show that Pope increased in almost all grades for most assessments.

Table 1: Magnitude of Change in Reading Comprehension between 2009-2011

Goal 1	Assessment	Grade K	Grade 1	Grade 2	Grade 3	Grade 4
	#1 TN Reading Sub-test	na	na	na	Small Increase	Medium Increase
	#2 Reading Predictors	na	Large increase	Medium Increase	Small increase	Large increase
	#3 Developmental Reading Assessment	Medium Increase	No change	Medium decrease	Small Increase	na
	#4 Scholastic Reading Inventory	na	na	Small increase	Large increase	No change

Goal #2: All students will improve problem-solving skills in mathematics.

Instructional Intervention: All students will use the four-step problem-solving model UPSL (understand, plan, solve, and look back) to increase problem solving in mathematics

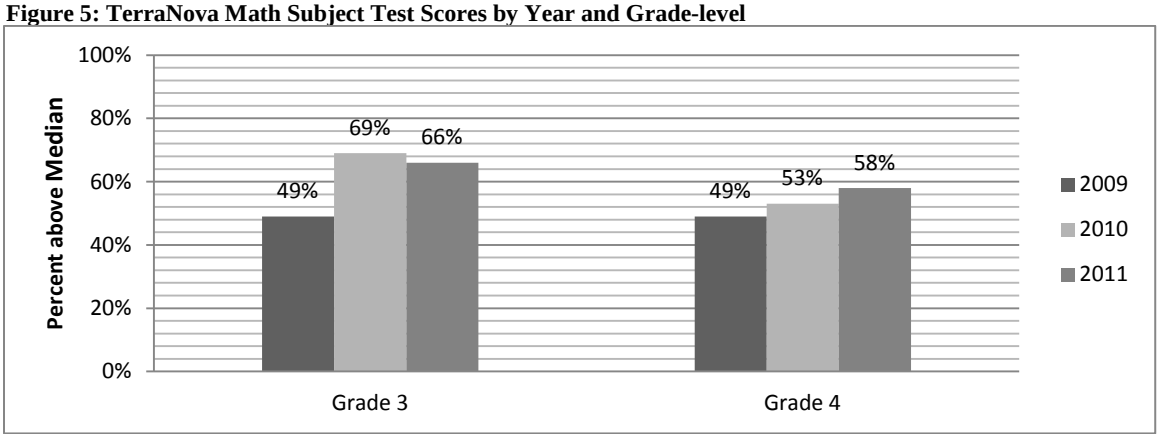
Assessments and Measures. Pope used the below listed student assessments and measures to evaluate students performance and thus develop its goals. Consequently, the status report uses these same assessments to evaluate student performance between 2009 and 2011.

- Assessment #1: TerraNova 3rd Edition Multiple Assessment Math Subject Test
  - *Measure: Percent above national median*
- Assessment #2: Math Predictors Assessment
  - *Measure: Percent at or above standard*

Data Analysis. The analysis uses the aforementioned assessments to measure the changes in student performance in problem solving by comparing the grade-level scores from the most recent, post-intervention assessment periods. The analysis does so by displaying yearly student performance data in a set of bar graphs where each bar represents the percentage of students falling in or above a category for a particular year.

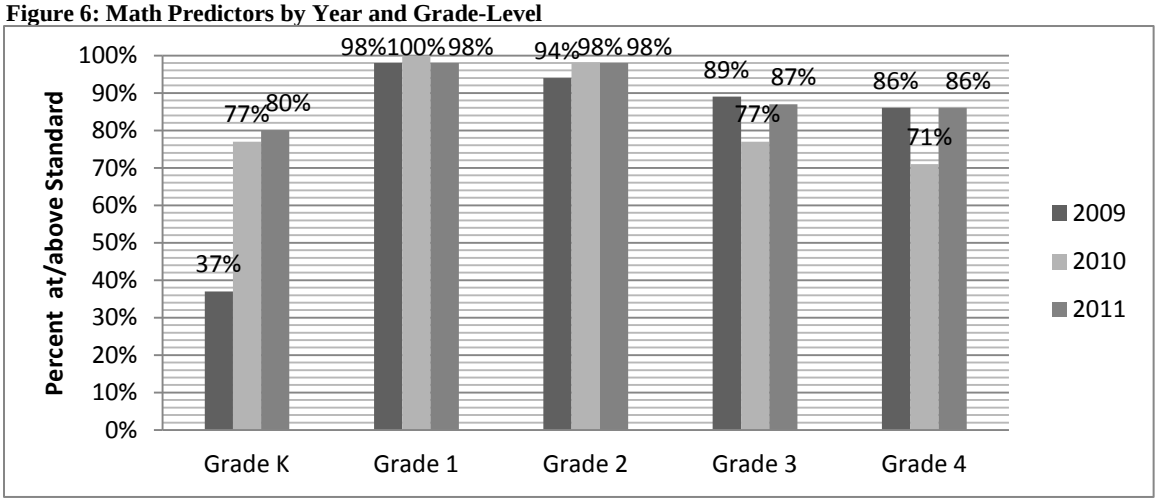
Assessment #1. Figure 5 shows data from the TerraNova 3rd Edition Multiple Assessment Math Subject Test. The vertical axis represents the percentage of Pope's students above the national median. The graph shows that student performance increased in both grades.

Figure 5: TerraNova Math Subject Test Scores by Year and Grade-level



Assessment #2. Figure 6 shows data from the Math Predictors. The vertical axis represents the percentage of Pope's students at or above standard. The graph shows that student performance increased in K and 2nd but decreased slightly for 3rd and unchanged in 4th grade.

Figure 6: Math Predictors by Year and Grade-Level



Summary. Table 2 summarizes the above findings regarding the amount of change in student performance in the area of problem solving. The data show that student performance increased in the TerraNova assessment but performance was only small or unchanged in the other assessments.

Table 2: Magnitude of Change in Problem Solving between 2009-2011

Goal 2	Assessment	Grade K	Grade 1	Grade 2	Grade 3	Grade 4
	#1: TerraNova Math Subject Test	na	na	na	Large increase	Large increase
	#2: Math Predictors	Large increase	No change	Small increase	Small decrease	No change

Evaluation

Assessment data showed an increase between 2009 and 2011on most assessment for most every grade.[4]

- There has been a 2% increase in achievment as measured by the TerraNova Reading Subject Scores for third grade students and a 5% increase for fourth graders.
- Reading Predictor scores have increased across grade levels: 1st grade by 14%, 2nd grade by 6%, 3rd grade by 3% and 4th grade by 43%.
- Developmental Reading Assessment indicated that gains in student performance were noted but not significant: Kindergarten increased by 4%, 1st grade no growth 0%, 2nd grade decreased by -5%, and 3rd grade increased by 3%.
- The Scholastic Reading Inventory for 2nd graders indicated a 2% gain, 3rd graders a 26% gain and 4th graders indicating no growth.
- There has been a 17% increase in achievement as measured by the TerraNova Math Subject Scores for third grade students and a 9% increase for fourth graders.
- Math Predictor scores have fluctuated cross grade levels: Kindergarten grade increased by 43%, 1st grade indicated no growth 0%, 2nd increased grade by 4% , 3rd grade decreased by -2%, and 4th grade indicated no growth 0%.

However, even though there were some increases in achievement, Pope seeks to continue to impact achievement in the area of reading and math. Thus, Pope will pursue two broad approaches to improve the effectiveness of its existing interventions, as it seeks to pursue its two goals. First, because of the success of the intervention programs for 3rd & 4th grade students, Pope will expanded the interventions to include K-2nd grade. Second, Pope will enhance the quality and frequency of its differentiated instruction process, using it as a teaching practice to increase the effectiveness of its existing intervention strategies. Pope has a three- part strategy for increasing the use of differentiated instruction.

- Pope has reviewed its assessment system and identified all the assessments that it uses to measure it goals across all grades (see appendix).
- Pope in 2011/2012 will provide professional development in the area of differentiated instruction to ensure that faculty know its features and implement it well.
- Pope will spend particular effort in targeting and helping those students in the 40th -60th percentile on the TerraNova.

[4] An increasing area of concern is the student population requiring accommodations (IEP & 504). Since 2009, the number of students in the 3rd grade subgroup has doubled from 5 to 9 and in 4th grade from 6 to 12.

Appendix

Table 3 shows the list of assessments that Pope uses.

Table 3: Pope Assessments

READING	MATH
Pre-Kindergarten 1. Pre-Assessment (pre) 2. Developmental Learning Profile (post)	**Pre-Kindergarten** 1. Developmental Learning Profile (pre, midyear, & post) shapes and number recognition to 10
Kindergarten 1. Phonological Assessment (pre & post) 2. Early Literacy Behavior Assessment (pre & post) 3. Fountas and Pinnell Benchmark Assessment (pre & post)	**Kindergarten** 1. Math Benchmark Assessment (pre, midyear, & post)
1st 1. Reading Street (pre, midyear, & post) 2. Reading Predictors (pre, midyear, & post) 3. Fountas and Pinnell Benchmark Assessment (pre & post)	**1st** 1. Math Predictors (pre, midyear, & post) 2. Everyday Math (pre, midyear, & post) 3. 100 Grid Assessment (pre, midyear, & post)
2nd 1. SRI (pre, midyear, & post) 2. Reading Predictors (pre, midyear, & post) 3. Reading Street (pre, midyear, & post)	**2nd** 1. Math Predictors (pre, midyear, & post) 2. Everyday Math (pre, midyear, & post) 3. UPSL Problem Solving (pre, midyear, & post)
3rd 1. SRI (quarterly) 2. Reading Predictors (pre, midyear, & post) 3. Reading Street (pre, midyear, & post) 4. Terra Nova (post)	**3rd** 1. Math Predictors (pre, midyear, & post) 2. Math enVision (pre, midyear, & post) 3. UPSL Problem Solving (pre, midyear, & post) 4. Terra Nova (post)
4th 1. SRI (quarterly) 2. Reading Predictors (pre, midyear, & post) 3. Reading Street (Pearson Baseline Test) (pre, midyear, & post) 4. Terra Nova (post)	**4th** 1. Math Predictors (pre, midyear, & post) 2. Math enVision Diagnostic Test (pre, mid, post) 3. UPSL Problem Solving (pre, midyear, & post) 4. Terra Nova (post)
5th 1. SRI quarterly 2. Reading Predictors (pre, midyear, & post) 3. Reading Street (pre, midyear, & post) 4. Terra Nova (post)	**5th** 1. Math Predictors (pre, midyear, & post) 2. Math enVision (pre, midyear, & post) 3. UPSL Problem Solving (pre, midyear, & post) 4. Terra Nova (post)