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School Administrative Policies and the Hidden Costs to Students and Taxpayers

Systemic Social Promotion, Curricula Shrinkage, and Personnel Decisions Foster Poor Academic Performance

When school administrators make policy decisions that ignore the abilities of their students, low achieving students continue to underperform in mathematics. Students spend their high school years retaking math classes in which they lack the prerequisites and basic math skills necessary for success. There are significant costs to public school education districts when students are promoted in grade level and/or programmed into classes where they lack basic skills. Retaking classes is especially true in mathematic courses which suffer high repeat rates such as Algebra 1. School districts' efforts to implement austerity measures, as a result of reduced funding, by eliminating teachers and shrinking curricula are negated by spending shrinking resources on re-teaching low-achieving and underprepared students. Students who have been subjected to years of social promotion and no longer fit in the minimalist system defined by administrators are subjected to years of frustration and failure. This paper examines these issues and the costs associated due to current administrative policies.

LEE BLACKWELL
Lynwood High School
8/5/2012

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When school administrators make policy decisions that ignore the abilities of their students, low achieving students continue to underperform in mathematics. Students spend their high school years retaking math classes in which they lack the prerequisites and basic math skills necessary for success. There are significant costs to public school education districts when students are promoted in grade level and/or programmed into classes where they lack basic skills. Retaking classes is especially true in mathematic courses which suffer high repeat rates such as Algebra 1. School districts' efforts to implement austerity measures, as a result of reduced funding, by eliminating teachers and shrinking curricula are negated by spending shrinking resources on re-teaching low-achieving and underprepared students. Students who have been subjected to years of social promotion and no longer fit in the minimalist system defined by administrators are subjected to years of frustration and failure. This paper examines these issues and the costs associated due to current administrative policies.

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Introduction

Low-performing students in mathematics suffer a common problem: a lack of understanding of basic mathematical skills. The inability to perform numerical operations, graph linear equations, and connect concepts to solve complex problems. Various testing regimes ranging from school, district, and state standardized assessments define the areas of weakness in low-performing math students. School district-level and school administrators engage in multiple meetings discussing the sagging numbers, propose new testing regimes, professional development seminars for teachers, and hire private consultants to develop short-term programs to address the problem.

What they do not do is stop social promotion. The promotion of students based on age or an unwillingness to retain students who are subject matter deficient exacerbates the problem of low-achievement. Students who fail the first semester of a two semester course are summarily promoted to the next class. Students with excessive absences and those who demonstrate poor attitudes toward learning are still promoted as are their high-achieving classmates. Social promotion fosters an attitude of indifference to learning, disrespect for academics, teachers, and an expectation of passing.

Combining social promotion with faulty class programming of students by enrolling students in classes they have already successfully completed facilitates the growth in the numbers of low-achievers in mathematics as well as other courses. The number of low-achievers in mathematics tends to increase after grade four and continues to grow to more than fifty percent of the students in same courses by the eleventh grade. District and school level administrators are aware of this fact. As part of the "No Child Left Behind" act, school ratings and performance are directly tied to state standardized assessments and are a primary focus of administrators and teachers. Improving school ratings is achieved only by reducing the number of low-achievers; administrative policies which do not decrease the number of low-achievers not only lowers ratings but wastes taxpayers' dollars.

The goal of this paper is to illustrate how administrative policies not only increase the number of low-achievers but also effectively waste a shrinking pool of dollars to educate our students. There exist many studies analyzing public education's effectiveness and dollars spent to educate our students. Authors, using the term "education production function", have produced many controversial and relevant studies describing how to effectively spend education dollars. The education production function deals with the relationship between school input (predictors) such as per pupil expenditures (PPE) and student outputs (outcomes) such as academic performance. For example, a study titled *Equality of Educational Opportunity* (Coleman et al., 1966), focused on school spending as a predictor of student achievement. Another by Sanders (1993) used school and district level characteristics to model student achievement.

My purpose is not to debate those endeavors but to address from a more personal level the impact of policies which do not benefit students. I will first detail how ineffective class programming, based on social promotion and failure, denies students academic growth. This issue is addressed by examining unofficial transcripts of five students' math curricula that are currently enrolled as seniors at the high school. The second analysis focuses on the entering ninth grade class in the fall of 2009 and follows them through two years of class programming in mathematics. I will examine the number of failures and class reenrollments.

Also, the paper presents the results of an analysis of the cost impacts, direct and hidden, of low-performing students repeating classes from grade 8 through grade 11 in mathematics. These costs are incurred through inefficient course programming and additional teaching costs. The costs are further exacerbated by the districts' inability or unwillingness to implement effective curricula with specific courses designed to fill the gaps from ineffective teaching, a lack of student and parental accountability, and social promotion programs which emphasize student age issues over student achievement levels.

The analyses examines the costs involved in re-teaching hundreds of students who have a history of low performance in mathematics upon entering high school. A particular focus will be those who fail Algebra 1 and the negative effects

on students themselves. Finally, a plan is developed to reduce these costs by teaching students what they need to know when they need to know it and giving these students meaningful alternatives to the current curricula.

The high school of interest in this paper consists of a population of 2,500 students, predominantly Latino (95%) and African-American (5%), in a school district of 15,000. According to published data, the district's latest graduation rate was 57% and the high school rate was 67.2% for 2011. District standardized test data (data gleamed from the results of the California State Test, CST) shows how a majority of students are routinely promoted through the district's math curricula while scoring in the bottom subgroups of the CST. For example, in grades 8 thru 11, Algebra 1 students displayed the following profile on the 2011 CST
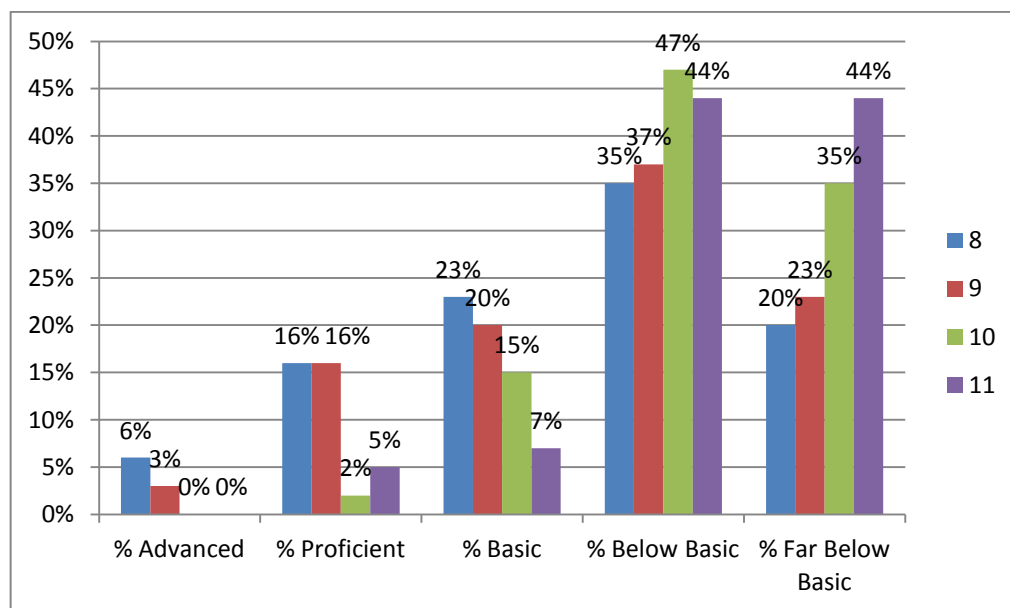
examination (Appendix C) for the district. This chart will be examined in more detail throughout the paper and provides clear evidence that the current system is totally dysfunctional in terms of mathematics achievement in this district as a result of inept administrative policies. The reader should note students who continue to retake Algebra 1 do not improve in later grades and that 88% of 11th graders are below basic and far below basic in the chart above.

The high school enrollment is predominantly "economically disadvantaged." According to the 2011 CST, of 1,883 students tested only 203, or just 10.7%, were

classified "not economically disadvantaged". The charts and tables that follow will therefore represent primarily "economically disadvantaged" students.

The Issue: Mathematics Curricula and Student Preparedness

Many public high schools today, especially those in large urban areas with predominantly minority populations, have a common problem: large numbers of low-achieving students in mathematics. In addition, they have significant numbers of students repeating mathematics classes, especially Algebra 1. Algebra 1, the first step on the path to higher mathematics, is normally taught in the eighth grade in most schools in America. According to Khatri, *"Algebra is the language that must be mastered for any course that uses math because it is the gateway for entry into any science, technology, engineering, and mathematics (STEM) discipline."* An article in *USA Today* stated the issues as such:

Many low-performing students take advanced math before mastering basic skills, study finds.
USA Today (9/22/11, Toppo) reports that "a new study out [Monday] finds that many of the nation's lowest-performing middle-schoolers...take algebra and other advanced math courses before they've mastered basic skills such as multiplication, division and problem-solving with fractions." Based on "data from the National Assessment of Educational Progress," researchers found that, "between 2000 and 2005, the percentage of very low-performing students in advanced math classes more than tripled." More specifically, "among the lowest-scoring 10 percent of kids, nearly 29 percent were taking advanced math, despite having very low skills." That translates to "about 120,000 kids" that were "inappropriately enrolled in classes that are supposed to level the playing field," according to Brookings Institution researcher Tom Loveless.

The issues addressed in this article are further accentuated by the following:

The AP (9/22/11, Quaid) adds that "the study is alarming to some advocates who worry its focus will add to an argument that minority and low-income kids should not take the class," when in fact such students need better preparation. Loveless concluded that, "in the end...it does more harm than good to put unprepared students in what he called 'fake' algebra classes taught by under-prepared teachers."

The issues addressed in the articles above are evidenced by the "No Child Left Behind" (NCLB) Law. Test results in Algebra 1 along with English Language Arts (ELA) have been at the forefront in judging the effectiveness of teaching methods, teachers, and public education. Hundreds of studies and opinions exist on the efficacy of the NCLB and its policies. The output the NCLB data has allowed educators to track the growth and decline of students from grades two through eleven by classifying them into five nationally accepted subgroups based on national standards defined for all core courses. The data produced from standardized tests is used to assess whether schools and districts are meeting their academic goals at the elementary, middle, and high school levels. The layman can determine quite easily how a school and district rates compared to similar schools and which courses appear the strongest at a particular school or grade.

The conclusions reached in the above report are readily observable when one examines the results of standardized tests in many low-performing school districts. A trend line representing the data (see Figure 3 below) will show an increasing slope for the lowest performance subgroup: "Far Below Basic" in grades two through seven. The fact is that this subgroup population continues to grow in low-performing public schools through the high school years as well. (A complete exposition of the California testing regime is available to the reader at www.cde.ca.gov).

The growth in the FBB subgroup is a direct consequence of decisions made by administrators at the district and school levels in low-performing schools. They consistently fail to take corrective actions to implement effective remediation programs to improve students' math skills. They focus on top-down approaches such curriculum realignments, course pacing plans which assume all students are on the same achievement levels, benchmark tests aligned to course standards to measure student subject mastery, etc. All of these programs provide the same answer at the high school level in Algebra 1: over fifty percent of Algebra 1 students are low-performing.

The data presented in this paper are not unique to Lynwood High School or Lynwood Unified School District. This district is representative of 100 similar schools defined by the State of California as low performing. The district and this particular high school have been awarded School Improvement Grants for being a persistently low achieving Title I school. What the reader should glean from this document is a thorough understanding of the consequences of not addressing the warning signs of low achievement in students. When students start showing BB/FBB performance in grades 4 thru 6 is it not wise to begin interventions and processes which can help the student then and not later? Social promotion of a student through the early years cannot be the best alternative to correcting low subject matter mastery; it is an abrogation of teaching and administrative responsibilities to knowingly send a student into a course in which he or she has demonstrated significant prerequisite shortcomings. The analyses presented in this paper will show just how foolish this reality is and that this reality has been the accepted policy for decades. For example, a July 2011 article in the *Daily News* stated a change in the Los Angeles Unified School District's policy on social promotion:

"Los Angeles Unified officials this month approved a plan to; once again, eliminate social promotion at the nation's second-largest school district. A decade after the district launched its first effort to end the controversial practice of passing academically unprepared children to the next grade; officials plan to work on a new approach that is expected to ensure students advance only if they meet academic goals. Taking a collaborative approach, district officials will ask teachers, parents and administrators to help create a standards-based promotion policy for the 2012-13 school year. But already many question how the cash-strapped LAUSD will be able to craft a meaningful plan to deal with kids who have to be held back.

Tamar Galatzan, the San Fernando Valley school board member who proposed the change, conceded that budget concerns would inevitably be an issue. "But helping students succeed has to be more important than anything else we do as a district," she said.

"Promoting a student from one grade to another when he or she hasn't mastered, or in some cases even learned, the previous year's lessons, doesn't make any sense." Social promotion is a name given to the unsanctioned practice of advancing students to the next grade even if they are failing classes. **Despite the academic drawbacks, some people believe it is healthier for students' social development to remain with their peer group**."

Class Programming to Failure

Low-performing mathematics students begin to demonstrate their low skill levels in grade four. By grade six, many low-performed have scored BB/FBB for three years as shown in Figure 3. Under current district policies all students entering grade eight are placed in Algebra 1, including all BB/FBB students from grade seven. Over fifty percent of Algebra 1 students score BB/FBB on the CST at the end of grade eight. A majority begin high school by retaking Algebra 1 even if they passed the course in eighth grade. Over the next few pages, I will present five cases of students who are seniors (due to social promotion policies not credits earned) in the high school. These students are representative of hundreds who have been programmed-to-fail even though their early math performances indicated low math skills years before entering high school.

Case 1: Student with a history of low math scores on district benchmark tests is enrolled in Algebra 1 Honors in grade nine. This student spent six semesters in Algebra 1and still needs to pass the second semester of Algebra 1 and Geometry.

**Case 1: Student enrolled in Alg. 1 Honors Gr. 9
after taking Alg. 1 in Gr. 8 with low scores**

	Grade 9	Grade 10	Grade 11
1st Sem.	Algebra 1 Honors Grade: F	Algebra 1A Grade: A / Geometry Honors A[1] Grade: F	Algebra 2 Honors A Grade: F
2nd Sem.	Algebra 1 Honors Grade: F CST: BB	Algebra 1B Grade: F CST: Basic / Geometry Honors B Grade: F	Algebra 2 Honors B Grade: F CST: FBB
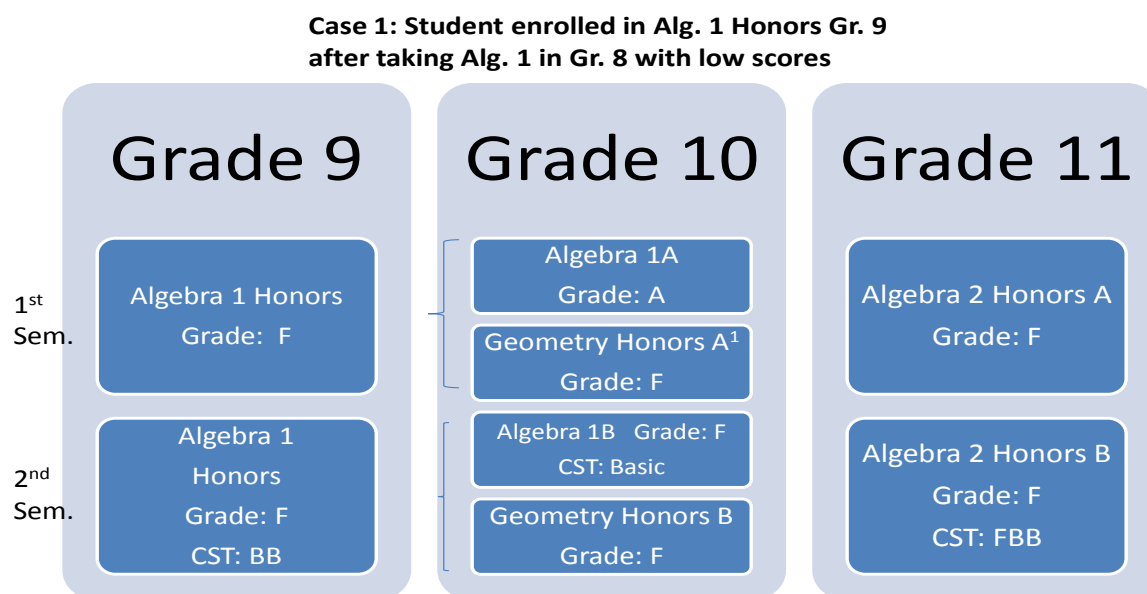
**Notes: 1. Student took Geometry A in summer
school, earned a "C". Gr. 12 reenrolled in Algebra 2.**

In addition, the student has also failed Algebra 2 both semesters. The student was taking two math courses simultaneously during both semesters of grade ten.

Case 2: Student enrolled in GM 8, in grade eight and scored BB on grade eight CST. This student has not achieved a grade above D in any high school level math

Case 2: Student enrolled in GM 8, Gr. 8. Scored BB on Gr. 8 CST

	Grade 9	Grade 10	Grade 11
1st Sem.	Algebra 1 A Grade: D	Geometry A Grade: D	Algebra 2 A Grade: F
2nd Sem.	Algebra 1 B Grade: F CST: BB	Algebra 1B Grade: D CST: BB Geometry B Grade: D	Algebra 2 B Grade: D- CST: BB

Notes: Gr. 12: student reenrolled in Algebra 2
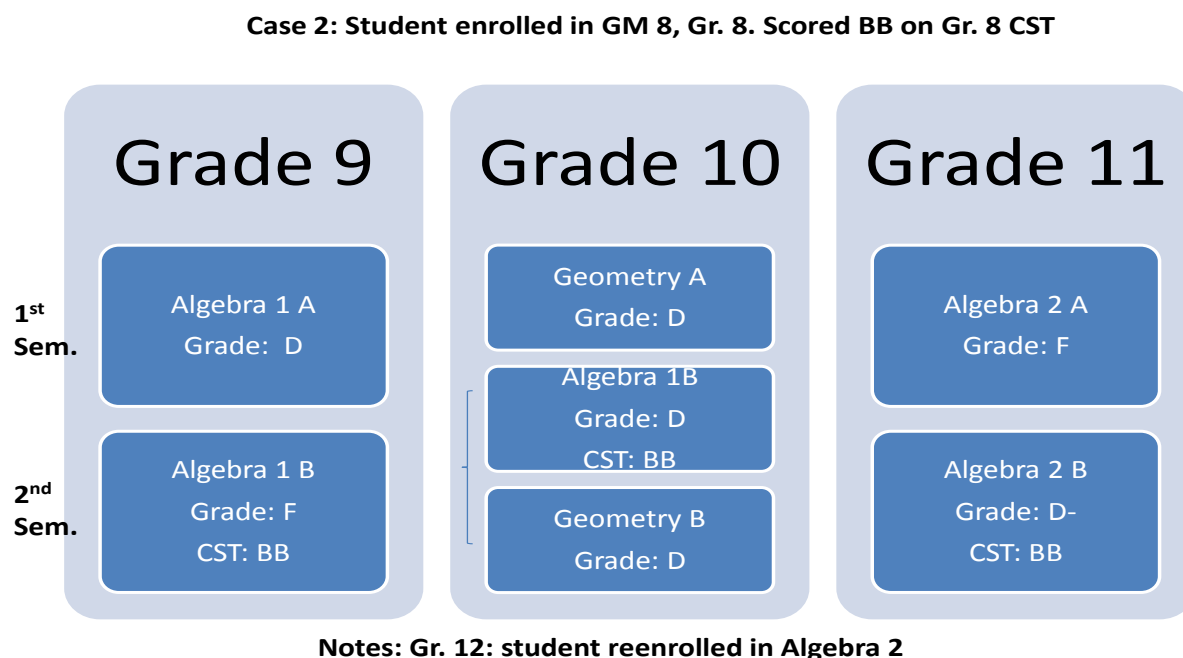
class and has consistently scored BB on all CST math examinations. During the second semester of grade ten, the student was taking Algebra 1B and Geometry B, simultaneously. The student is repeating Algebra 2A as a senior.

Case 3: English language learner student with low GM 8 scores. During the ninth grade, the student was enrolled in an algebra support class because of low scores in the eighth grade. Algebra 1 SDAIE is an algebra class for those not proficient in English. The student enrolled in two math courses, Algebra 2 and geometry, each semester while in grade ten and failed both. The student has failed Algebra 2 in three semesters and must pass both Algebra 2B and geometry as a senior.

Case 3: English Language Learner. GM 8 with low scores in Grade 8

Grade 9

1st Sem.

Algebra 1 SDAIE A
Grade: C

Algebra 1 Support
Grade C

2nd Sem.

Algebra 1 SDAIE B
Grade: C

Algebra 1 Support
Grade: C
CST: BB

Grade 10

Algebra 2 ELM A
Grade: F

Geometry ELM A
Grade: F

Algebra 2 ELM B
Grade: F

Geometry ELM B
Grade: F, CST: FBB

Grade 11

Algebra 2 A
Grade: F
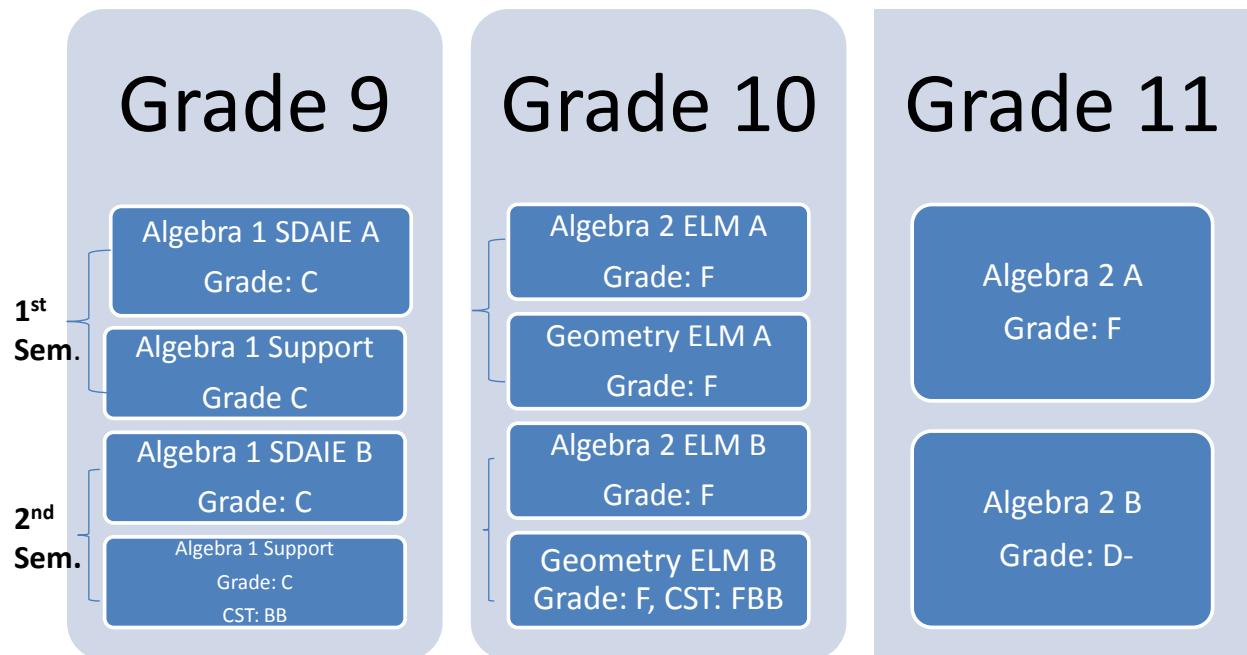
Algebra 2 B
Grade: D-

Note: Grade 12 – Student enrolled in Algebra 2 and Geometry simultaneously both semesters

Case 4: Student with Algebra 1 in grade eight has failed geometry four semesters. The student entered Algebra 2 in grade twelve without passing both semesters of Algebra 1. The student was enrolled in math support classes for geometry and still failed geometry. Support classes are not offered to eleventh grade students. The student has scored BB on all state standardized tests since the eighth grade.

Case 4: Student with Algebra 1, Gr. 8 and has failed Geometry 4 times. Entered Gr. 12 in Algebra 2 without passing a both semesters of Alg.1

Grade 9	Grade 10	Grade 11

1st Sem.

Grade 9: Algebra 1 Grade: D

Grade 10: Geometry SEI A Grade: F / Geometry Support Grade: C−

Grade 11: Geometry A Grade: F

2nd Sem.

Grade 9: Algebra 1 Grade: F CST: BB

Grade 10: Geometry SEI B Grade: F / CST: FBB / Geometry Support Grade: F

Grade 11: Geometry B Grade: F CST: BB
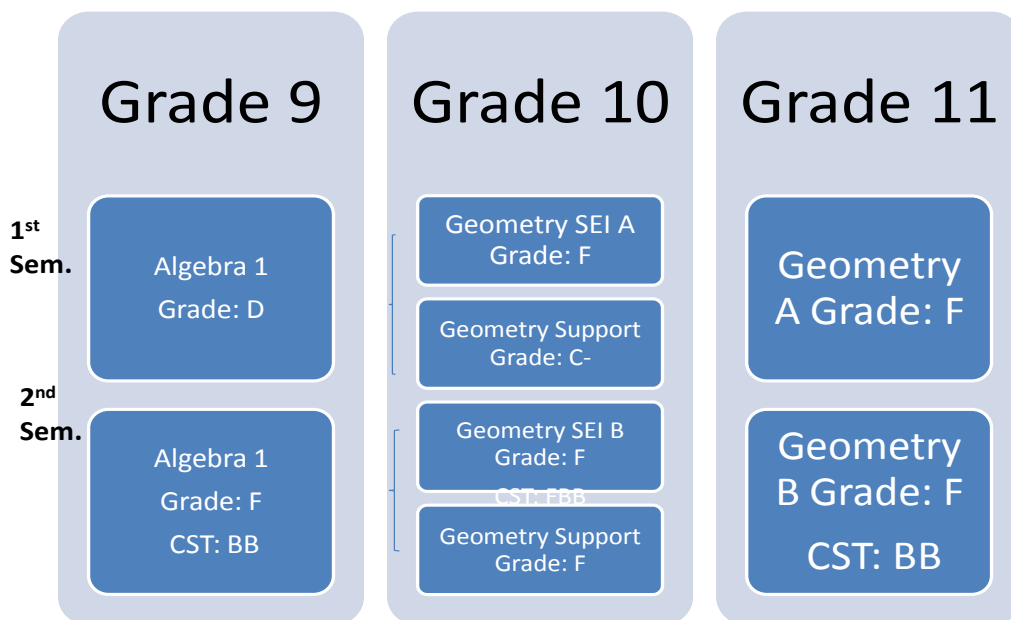
Case 5: Student failed Algebra 2 and geometry before taking Algebra 1. The student enrolled in and passed Algebra 1A in summer school and then was reenrolled in the fall of 2010 subsequently failing Algebra 1B. The student's first math class was Geometry which was passed with a grade of C. The next school term the student enrolled in Algebra 2 A and again in Geometry SEI A, a course designed for low-achievers and failed. The student then enrolled in and failed the second semester course, Geometry SEI B. There was no obvious reason for the student to reenroll in geometry both semesters after previously passing one semester. One can only speculate as to why the student failed geometry both semesters. The student has to enroll in at least four math classes during the senior year to meet graduation requirements.

Case 5: Student Failed Geometry , Algebra 2 before taking Algebra 1

	Grade 9	Grade 10	Grade 11
1st Sem.	No Math	Algebra 2 A Grade: F / Geometry SEI A Grade: F	Algebra 1 A[1] Grade: C
2nd Sem.	Geometry Grade C CST: FBB	Geometry SEI B Grade: F / Support Math Grade: D- CST: FBB	Algebra 1 B Grade: F CST: FBB

Note: 1. Student took Alg. 1A in summer school and passed with a C. Student repeated Alg. 1A , fall 2010. Student needs Geometry, Alg. 1B, and Alg. 2 A & B in Grade 12

The five cases presented here are not untypical of the type of class programming low-achieving math students are forced to endure. These cases dramatize the failure of social promotion polices and the devastating consequences on students who are subjected to a system of neglect and poor administrative practices.

The 2009-10 Enrollees in Algebra 1

Students in the Lynwood Unified School District take their first course in Algebra 1 when entering the eighth grade. The district formerly offered a General Math 8 (GM8) course which was based on California Standards for grade six and seven mathematics in middle school. The course was also assessed as part of the California Standards Test (CST). The enrollments in GM8 and Algebra 1 are shown in Figures 1 and 2 for the years 2006 thru 2011. The data is derived from the website: http://star.cde.ca.gov/. As the reader can observe, the enrollment in GM8 declined steadily versus Algebra 1 during the six year period. It is obvious that administrators in the district made a conscious decision to eliminate GM8 from the curricula and to enroll all students in Algebra 1 for eighth grade mathematics without any concerns for past student performance.

#Students Enrolled GM. 8 and Alg. 1

Year	#Students(gm 8)	#Students(Alg. 1)
2006	1006	313
2007	513	842
2008	566	825
2009	228	1096
2010	53	1136
2011	7	1107
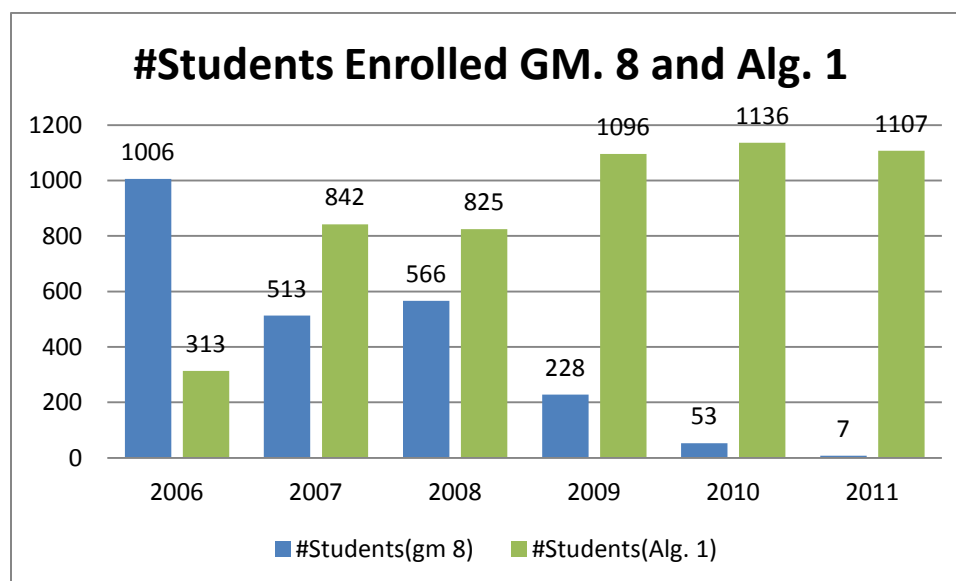
Figure 1: Enrollment in GM8 and Algebra 1

Figure 2 shows the subgroup performance for below basic (BB) and far below basic (FBB) students during this period for both GM8 and Algebra 1. As the data shows, more than 60% of GM8 and more than 50% of Algebra 1 students were BB/FBB entering the ninth grade during five of the six years displayed. The fact that over 50% of GM8 and Algebra 1 students were performing at such a level should have been sufficient evidence to administrators that their policies were

lacking. For the entering class of 2009, 57% (GM8) and 50% (Alg.1) of the incoming ninth graders were BB/FBB in math. (The spring 2009 CST is the results for the entering class of 2009).

The analysis that follows focuses on the school years 2009 thru 2011 to show the impact of two crucial administrative policies at the district and school levels. First, the decisions made to abolish GM8 and to focus the district's math program on Algebra 1 for grade eight. Second, the decision to maintain the policies of social promotion throughout a student's high school years.

During the period 2009 to 2011, the district reduced the number of teachers by more than 300 due to budget cuts both at the local and state levels. Many senior teachers were laid off and/or given early retirement packages while the student population dropped from 16,000 to approximately 15,000. In addition, many school counselors whose job was to program students' classes were also laid off. The downsizing was also accompanied by school format modifications (block schedule to special support classes in math and ELA and finally back to a non-block schedule with a support class for math and ELA). Class sizes were increased and the curricula were stripped of some computer classes and foreign language courses.
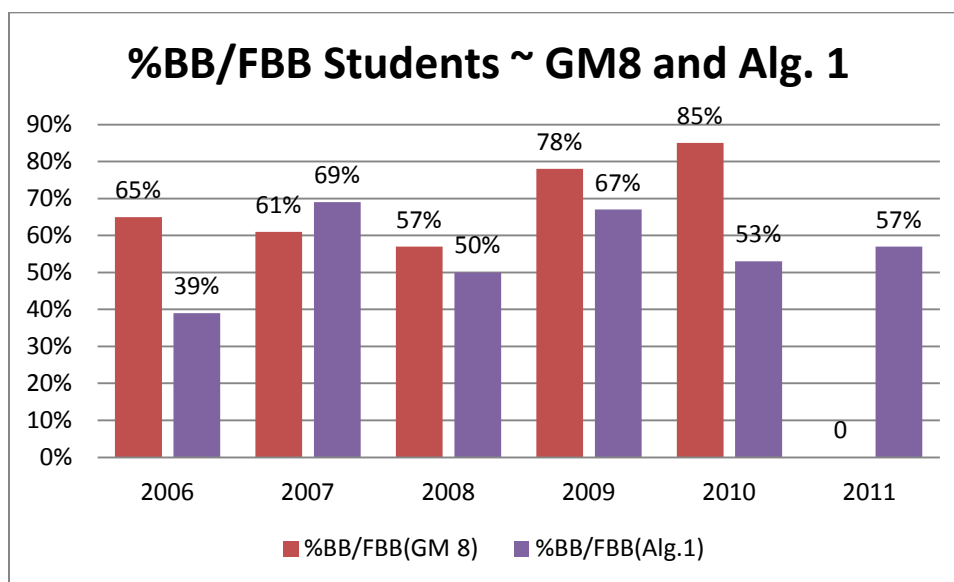

Figure 2: %BB/FBB Students ~ GM8 and Alg. 1

Entering ninth grade math students were routinely programmed into Algebra 1. A small number of students who showed exceptional ability were programmed into geometry or Algebra 2. Some of the entering students who had passed Algebra 1 in grade eight were reenrolled in the same course in grade nine. This policy resulted in many students being under motivated to perform at their best in the class (opinions expressed by students in eighth and ninth grade classes). Students who had failed Algebra 1 in grade eight were also reenrolled in Algebra 1 in grade nine. At the end of the 2009-10 school year, the CST results confirmed how this policy failed with 85% (GM8) and 53% (Alg.1) students scoring BB/FBB in the district.

Numerous alternative courses have been proposed to administrators by the author to remediate the math skill weaknesses shown by these students. All recommendations have been rejected to this date. As the reader can see from Figures 1 and 2, students who tested BB/FBB in either GM8 or Algebra 1 were at a definite disadvantage when reenrolled in Algebra 1 in grade nine.

The disadvantage is manifested in several ways. First, the student lacked proficiency in basic numerical skills as evidenced by past performances on standardized tests regardless of grades obtained in the classroom. Second, there likely has been no assessment of why the student failed. Third, if an assessment was done, there is little or no evidence that the student or parents had been informed of the results and/or provided assistance in correcting areas of weakness. The circumstances I am describing are for a student who has been exhibiting the same math weakness for years before entering the ninth grade. The subgroup curves for mathematics achievement are shown in Figure 3 grades 2 thru 7 for the district for the spring 2009 CST.

The curves represent the elementary mathematics' performance by CST subgroups: advanced, proficient, basic, below basic, and far below basic. The five subgroup categories are analogous to the contemporary grading scale of A thru F, respectively. The data in Figure 3 is derived from CST test results for LUSD. (Source: www.cde.ca.gov/star). The data shows several trends that are well known in the education community. Students' math performance appears to

improve from grades 2 thru 4 for the "advanced" subgroup while the "below basic" and "far below basic" groups decline slightly which is a positive sign.

However, this trend reverses itself in grades five thru seven with the "adv" and "prof" groups declining while the "basic", "below basic", and "far below basic" increase four to five percentage points. Focusing upon the BB and FBB subgroups whose growth are fed by students falling out of the higher groups (adv, prof, and basic), the data shows that these students do not comprehend the subject matter as a product of inadequate teaching and/or test preparation, student attendance issues, and of course social promotion. Regardless of the reasons, twenty-six (26%) of seventh grade students will enter Algebra 1 in grade eight BB/FBB in mathematics. Figures 1 and 2 serve as predictors of future student performance to administrators and school officials. As the reader will see, these predictors are obviously ignored in terms of offering bottom-up, student-focused, remediation.

Figure 1 above shows the spring 2010 mathematics test-takers for the district. Of the approximately 1,200 students tested on the 2010 CST only fifty-three were GM8 students and over 1,100 grade 8, Algebra 1 students. Recall that 26% of these students completed grade seven (2009), BB/FBB (approximately 250 students) and are part of the 2010 test group (Algebra 1). Figure 2 shows that 53% of the Algebra 1 students tested BB/FBB, that is 53% of 1100 (583) plus students entered high school (2010 – 2011 school year) BB/FBB in mathematics and will most likely, based on current criteria, repeat Algebra 1.

The wrongheaded policy that facilitates this reality is justified by administrators claiming that teachers can "***teach the students up***". That is, teachers are expected to improve a student's performance on the CST by at least one level. For example, a student who tests FBB and passed Algebra 1 in grade 8 can be moved to BB in grade 9 either when enrolled in ninth grade Algebra 1, again, or geometry (an option for students who passed Algebra 1 in grade eight but scored FBB on the CST).

CST Math Subgroup Performance Grades 2 thru 7 (2009, LUSD)
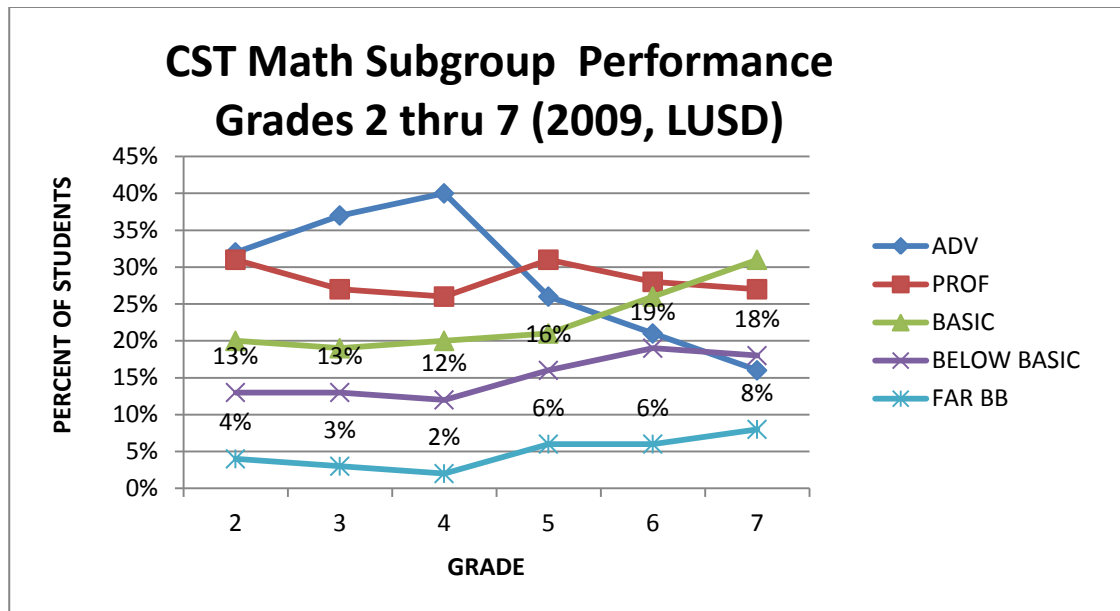
Figure 3 CST Math Performance by Subgroup Grades 2 - 7

The "***teach the students up"*** policy ignores the reasons why students scored FBB in their previous class and it also ignores the history of a student who has scored BB or FBB in successive years before entering high school. The policy assumes that years of underachievement can be corrected in a few months of teaching students new math skills which by their very nature are dependent upon prerequisite math skills. For example when students are not taught how to manipulate fractions in grade school, the policy assumes that the student can somehow solve linear multistep equations in Algebra 1 which require students to multiply, divide, and combine numbers; hence creating fractions. Or, if a student is required to factor a simple trinomial, the student should be able to do so regardless of the fact that the student has not been taught the concepts of "least common multiples", etc. The "***teach the students up***" policy is nothing more than a panacea for not addressing the underlining problems created by social promotion and administrative neglect.

The Fall Class of 2009

The fall class of 2009 entered the ninth grade at LHS with the profile shown in Figure 4. Sixty-five percent (65%) of the entering ninth graders were BB/FBB in math. A majority of these students were reenrolled in Algebra 1 even though many had passed the course during grade eight. Of the 660 (622 had CST scores shown in Figure 4), 599 of them were tested in Algebra 1, 40 in geometry, and 7 in Algebra 2 on the spring 2010 CST. (The state chart is shown in Appendix C. Source www.star.cde.ca.gov/star2010...)
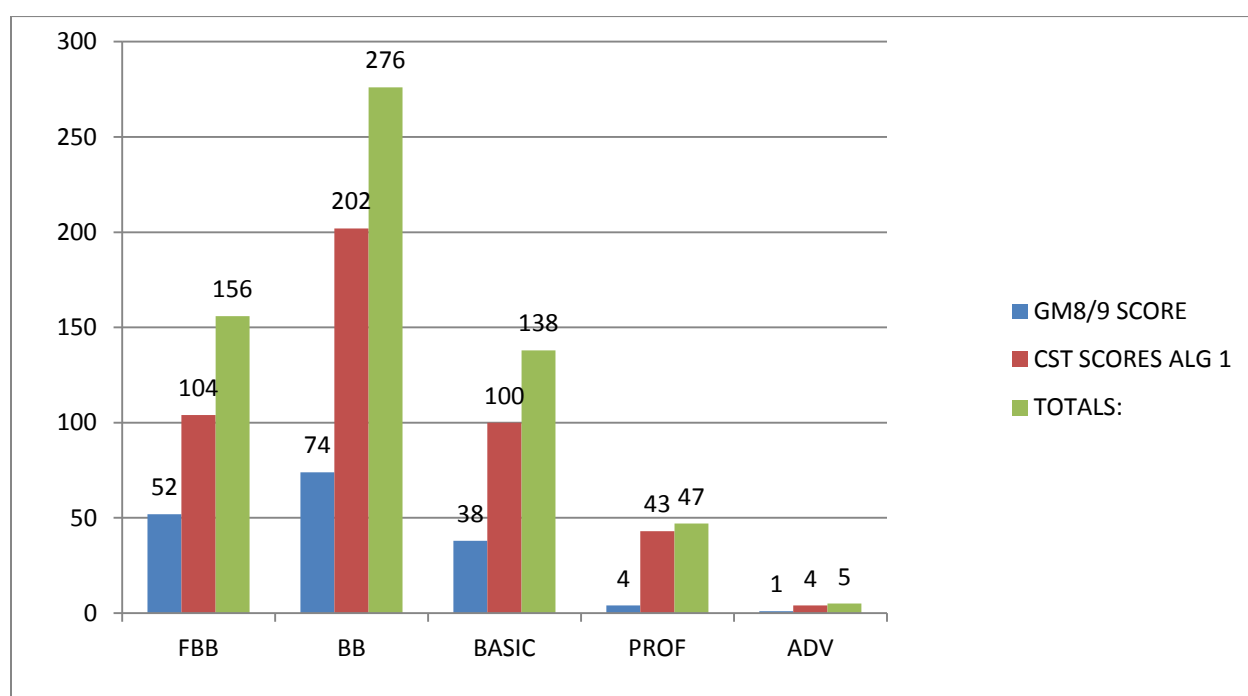
Figure 4: Entering Math Students at LHS Fall 2009

School administrators established specific criteria for entering students to enroll in Algebra 1, geometry, or Algebra 2. For students to enroll in geometry they were required to pass grade eight Algebra 1 and score Basic or above on the CST. (Some students who scored BB/FBB were enrolled in a support math class plus geometry). Students enrolled in Algebra 1 were those who failed grade eight Algebra 1 and scored BB/FBB on the grade eight CST in Algebra 1. In addition, some students who passed eighth grade Algebra 1 with high CST scores were also enrolled in Algebra 1 thereby, wasting one year of math instruction. Question: given the administrators' decisions in fall 2009, how did these students perform?

Before answering the above question, let's review the data obtained so far.

1. 65% of entering 9th graders (Fall 2009) are in the BB/FBB subgroups
2. More than 94% of 9TH graders tested in Algebra 1 on the Spring 2010 CST
3. More than 90% of incoming 9th graders were enrolled in Algebra 1 regardless of 8th grade performance.
4. The district deemphasized GM 8 in favor of Algebra 1 only even though there were significant numbers of students performing in the BB/FBB subgroups.
5. Over 50% of eighth grade students completing Algebra 1 enter high school in the BB/FBB subgroups.
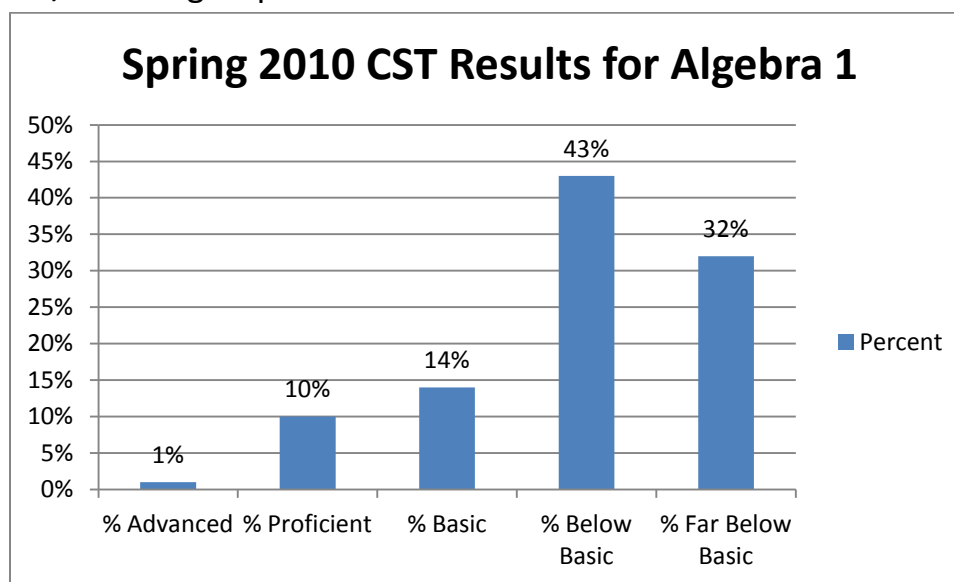
Figure 5: Fall 2009 9th Graders Spring 2010 CST Results in Alg. 1

Seventy-five percent, **75%**, of the students tested BB/FBB on the Algebra 1 examination. In other words, the students actually performed worst after repeating the same course from grade eight.

In addition to the results of Figure 5, according to the WASC Report 2012, the Report Card Analysis shown in Figure 6 indicates a failure rate of 50% was achieved for Algebra 1 students during the second semester of 2009 to 2010 school year. No data was provided for the first semester; however, it is reasonable to assume that the failure rate was comparable as evidenced by the 2010-11 data for two semesters. The average failure rate over three semesters is

51.1% with the number of failures rising to 56.7% in Algebra 1 during the second semester of 2011.

Course	2009-2010 2nd Semester % of Fs	2010-2011 1st Semester % of Fs	2010-2011 2nd Semester % of Fs	Average
Algebra 1(open)*	50.1%	46.5%	56.7%	51.1%
Geometry(open)*	31.7%	17.6%	21.5%	23.6%
Algebra 2(open)*	24%	23.8%	31%**	26.2%

Figure 6: Report Card Analysis ~ WASC Report 2012

*Open class i.e. general education class. **Derived from pass rates for A thru D grades

Figure 6 also shows the failure rates for geometry and Algebra 2 for the fall 2009 entering class. The failure rate for the two subjects was significantly lower since these students had demonstrated higher math skills.

Using the spring 2010 CST, the official number of students enrolled and tested in ninth grade Algebra 1 was 599 students, using the data in Figure 6 for Algebra 1, second semester, 300 students failed and faced reenrolling the following school year in Algebra 1 to partially complete the high school's mathematics requirement for graduation.

The 50% failure rates for second semester Algebra 1 ninth graders; a spring CST 2009 in which75% of these same students scored BB/FBB; and the fact that a majority of these students were repeating Algebra 1 as ninth graders is totally ignored when administrators claim they are working for the student's benefit.

What are administrators doing to benefit students when they eliminate GM8, direct all students to Algebra 1 in eighth grade, and simultaneously ignore years of CST examinations results which clearly indicate significant and growing subject matter learning problems? Administrators claim they are "data driven" when

making decisions concerning curriculum, student achievement, etc. When the data shows that students are increasingly BB/FBB year after year, what justifies the decisions made to limit classes and not institute remediation?

 Effective remedial and intervention strategies that could have been initiated during the elementary years were not. Mandatory after school tutoring, Saturday school, computer laboratory practice sessions, and increasing parental involvement are just a few examples of low cost strategies using in-house teaching staff that could have been deployed. Instead administrators have tried to remediate at the high school level with "math support" classes in Algebra 1 and geometry while the student is currently enrolled in the either class. Paid consultants are brought in to instruct teachers on how to effectively teach a support class in Algebra 1 and/or Geometry neither of which has a defined curriculum. At the end of the term, the student leaves the class with a meaningless grade and still lacking basic math skills.

The mathematics curricula path the failed 300 students must follow to satisfy graduation requirements is described in Figures 7 and 8 below for two specific cases involving the exit examination, CAHSEE: those who pass the CAHSEE and those who fail the exam during the tenth grade. The latter case is significant because it requires students to take one of two additional math courses during in the eleventh grade and possibly twelfth grade if they continue to fail the CAHSEE. (The CAHSEE math class is a one semester length class of "teaching to the test" in which students practice taking the exams' various strands. Once a student passes the CAHSEE, he/she can enroll in another non-math elective.)

Scenario	9th Grade	10th Grade	11th Grade	12th Grade
Math Curriculum Path for Students Passing CAHSEE during 10th Grade				
1. Pass Alg. 1 @ Gr. 8	Geometry	Algebra 2	PreCalculus or Statistics	PreCalculus/Calculus/Statistics or no math
2. Fail Alg. 1 @ Gr. 8	Algebra 1	Geometry	Algebra 2/Statistics	PreCalculus/Statistics/no math
3. Pass Alg.1 @ Gr. 8	Algebra 1	Geometry and/or Alg.1[1]	Algebra 2 and/or Geometry[3] /Statistics	PreCalculus/Statistics/no math

Notes:
1. Student may have passed one semester only
2. Student repeats Algebra 1 if Failed semester 1 or 2
3. Student repeats Geometry if failed semester 1 or 2

5/28/2012   4

Figure 7: Math Curriculum Path ~ Pass CAHSEE

Using the data above, the 300 students who failed Algebra 1 during the first semester of the 2009/10 school year will have to follow scenario 3 in the chart. During the next three years of their high school career, these students must pass at least one semester of Algebra 1 while enrolled in another math class. An obvious choice for these students is to attend summer school, however, there have been significant cutbacks in course availability and the eligible grades taught. As a result, a majority of the failed students will enter the next school term enrolling in Algebra 1 for at least one semester.

Scenario	9th Grade	10th Grade	11th Grade	12th Grade
4.Pass Alg. 1 @ Gr. 8	Geometry	Algebra 2[4]	Algebra 2[4] /Statistics plus CAHSEE Math	Statistics /CAHSEE math or no math
5.Fail Alg. 1 @ Gr. 8	Algebra 1	Geometry[4]	Algebra 2/Statistics/ Geometry[5] plus CAHSEE Math	Statistics/ CAHSEE math [5,6]/no math

Math Curriculum for Students Failing CAHSEE during 10th Grade

Notes: 4. Student may have passed one semester only
5. Student repeats Geometry if Failed semester 1 or 2. Optional on CAHSEE
6. Student repeats Algebra 2 if failed semester 1 or 2. optional CAHSEE math

5/28/2012   5

Figure 8: Math Curriculum for Students failing CAHSEE

Figure 8 shows the math curriculum path for a student who fails the CAHSEE. Students who fail the CAHSEE have placed themselves in a very tenuous position in terms of graduating from high school. Failing the CAHSEE exam is a dramatic signal that the student's grade 3 thru 8 math instruction was a failure, i.e. a district failure. The subgroup with the highest failure rate on the CAHSEE is the FBB. Recall Figure 3, the FBB subgroup doubles from grade 3 to grade 7 and grows significantly in grade 8 after enrollment in Algebra 1 (according to CST results) as shown in Figure 2. District officials and administrators have access to student performance data during their academic life and therefore are aware or should be aware that significant numbers of students are "falling behind". "Falling behind" in this instance means, the students are not mastering number sense, basic math operations, linear graphing, and introductory geometry concepts.

The student that fails the CAHSEE will normally follow scenarios 4 or 5. In addition, the FBB student, in particular, further compounds the situation by failing

other math classes during their last two years of high school and further lessening their chances for graduation. The pass rate for the CAHSEE decreases percentage-wise each time a group of students retakes the CAHSEE. By the time a student becomes a senior; the student has potentially taken and failed the math portion *FIVE* times. The students who complete their senior year without passing the CAHSEE comprise about 15% of the class and in general are FBB in mathematics as well as lacking sufficient credits to graduate.

In this section, I have tried to provide a narrative as to how low-achieving students are essentially entering high school on a treadmill of math frustration:

1. In the ninth grade they repeat Algebra 1 with a 50% change of failing.
2. They lack the basic math numerical skills and will receive little, if any, remedial teaching.
3. They are placed in an Algebra 1(or geometry) class with a pacing plan which allows minimal time for re-teaching or remediation.
4. If they are in a support math class, it prepares them for a standardized test without addressing their lagging prerequisite skills.
5. Once a student fails the first semester of the course (Algebra 1 or geometry), he or she is promoted to second semester of the course even though they are technically ineligible for the class. The failure rate for the second semester exceeds the first semester.
6. In the tenth grade, the student is likely enrolled in two math classes plus being prepared by a math teacher for the CAHSEE.
7. If the student is FBB, then the student has a good chance of failing the exam, and will enroll in CAHSEE math in grades eleven and twelve plus other math courses.
8. Finally, this worst case scenario ends with the low achieving student failing the CAHSEE *five* times and not graduating from high school.

The list of student milestones above is a direct result of administrative decisions not to provide meaningful interventions and curricula to students who have demonstrated low skills beginning in grade 4 and beyond. Currents attempts at remediation in the high school environment are essentially worthless because the

subject matter deficit is too great and students' attitudes toward mathematics are so negative as to constrict meaningful participation by the student. Remediation approaches such as those advocated by Clayton in "*Effective Mathematics Teaching: Remediation Strategies: Grades K-5*" offer excellent procedures for aiding students described above. However, administrative support for such programs is lacking and instead paid consultants are used to promote gimmicks and unproven theories as solutions for student achievement problems.

Finally, cost is an issue that district administrators view in terms of expenditures for teacher salaries, personnel, security, books, etc. To my knowledge, the dollars spent to re-teach students are ignored because they believe students fail only as a result of poor teaching not faulty class programming or a lack of student accountability and prerequisite knowledge. Administrators promote teaching to the standards that are emphasized on standardized tests with little regard for students' lack of subject mastery of basic concepts. For example, low performing Algebra 1 and geometry students are routinely promoted to Algebra 2 setting them up to fail as evidenced by the five cases presented in the section "Class Programming to Failure".

The Curriculum Cost Analysis

The idea of cost attributed to low-achieving student performance is a euphemism for what should be denoted as **waste**. Waste in the sense that schools district, LUSD and similar ones identified by the state as low-performing, spend a high percentage of their budgets to re-teach students who consistently fail math classes. The analysis presented here, I believe, is the first time anyone has taken this approach to assessing the impact of low performance and failure as a direct result of administrative decision-making. The analysis focuses on 2009 – 2011.

School budgets in California are funded by the state using a methodology based on student attendance figures called average daily attendance (ADA) which allocates a fixed dollar amount per student enrolled in the school and attending classes. (See reference 3). The funding does not differentiate between a student enrolling for the first time in a class or reenrolling in the same class. LUSD received $115,781,858 for the 2010-2011 school term or approximately, $7,700 per student in the district if the student's attendance met state guidelines. (The $7,700 figure likely doesn't include all costs but is serves as a valid number for discussion). These funds vary by school site and year-to-year depending upon district enrollment, school site attendance, and state funding allocations, etc. On a semester basis, a student generates $3,850 to cover the expense of teacher salaries, book costs, supplies, and other expenses. With the normal student load being six classes, an individual class equates to approximately $640.

Using this data as the foundation for determining costs (funds allocated per student) the following algorithm was developed. The funds allocated to teach students, as previously stated, are based on attendance data and are not class specific. When students reenroll in a class they have failed, the school/district receives the same amount of funds. The issue is whether these funds are best used to support students moving forward or to support students on a treadmill due to their low skills. The author is not suggesting that funds should not be allocated for teaching low skill/failed students; but can these funds provide a better strategy for helping these students with real remediation courses and interventions which improve their skills and limit failures instead of reenrolling

them in classes where an "F" becomes a "D" and the student continues low-skilled?

Specifically, when a student is reenrolled in Algebra 1 in the ninth grade after failing the same course in the eighth grade, the high school is allocated $640 for that student to repeat Algebra 1 plus five other courses ($3,210). Assuming the ADA rate was the same the previous year, the district has already allocated $640 per semester to teach this student Algebra 1 in grade eight. In addition the student may be enrolled in a math support class (another $640 for math) which is supposed to upgrade his/her skills. The school's total math cost is $1,280 for that student each semester. (The effectiveness of math support classes is the subject of much debate in the district. The goal of these classes is to help the student move up one subgroup level on the CST).

Contrast this situation to a ninth grade student who enrolls in geometry without a math support class and has the option of taking a non-math elective. The school is allocated the same $7,700 for this student. If this student successfully completes four years of high school without repeating one class then the cost of educating the student is approximately $30,800 in ADA dollars to the LUSD. (See scenario 1 in Figure 7).

The issue of cost addressed in this paper acknowledges that funds will always be spent in a system of mandatory public education but how much is spent due to social promotion failures and neglect of low skill students? The cost model presented below addresses this question. Using the data for 2009 to 2010 as an example, 660 entered in the fall of 2009. From Figure 4, 168 students were enrolled in GM8 (the previous year) and required Algebra 1 in grade nine, 492 students had taken Algebra 1 as eighth graders which mean at least 492 students were repeating Algebra 1. (The number of students passing or failing in the eighth grade requires an examination of personal student records which are not available). That number of students requires at least two and possibly three fulltime teachers (a teacher with five classes of thirty students per class) in addition to teachers who have mixed schedules of Algebra 1 and other classes.

In the chart below, the **current model** is shown which is representative of the cost per class or all classes depending upon how one wants the data. This simplistic model does not consider whether students pass, fail, or repeat classes. Its only goal is to maximize attendance. The **curriculum cost model** separates the number

$$\text{Current Model: Number of Students Enrolled} * \text{ADA rate} = \text{Total Cost}$$
$$\text{Curriculum Cost Model: } (\#\text{1st Time Enrolled} + \#\text{Course Repeats} + \#\text{Failure Repeats}) * \text{ADA Rate} = \text{Total Cost}$$

of students enrolled into three categories: 1$^{\text{st}}$ time enrolled students, course repeat students (*retakes*) due to programming, and course repeats due to failure. This approach examines how the funds are allocated per student and provides transparency into how public education funds are being spent and for what purpose. The model is being used to examine just one-sixth of a curriculum but could obviously be applied to all courses in a publicly-funded high school.

The cost analysis focuses upon grades nine (starting with the fall 2009 class) and ten only, for math courses Algebra 1, geometry and Algebra 2. To simplify calculations, I have used the average failure rates for three courses given in the WASC report of 50.0% (Algebra 1) and 28.0% (geometry) as first semester failure rates for 2009-10. The CST numbers for actual students tested are used as the official enrollment in each class for the years 2010 through 2011 (See Appendix C).

Year 1: 2009 - 2010

The total cost (allocated funds) to teach the 660 students in Algebra 1 was $422,440 for one semester (the first semester of 2009). The cost for 492 repeat students is $314,880 which I would denote as the penalty costs for re-teaching those students who failed (in the eighth grade) or were miss-programmed (*retakes*) into Algebra 1 in the ninth grade. The $314,880 would have been allocated to the school anyway based on attendance figures alone even if these 492 students would have taken geometry and not repeated Algebra 1. The alternative to this scenario consists of the 492 students enrolling in geometry

thereby "saving" $314,880 in re-teaching costs and applying it to teaching geometry and therefore moving students forward.

Recall from Figure 4 that 50.1% of Algebra 1 students failed the second semester of the 2009-10 school year. The 50.1% failure rate means that approximately 330 of the 660 students must retake Algebra 1 again the following year or in summer school at additional costs. The WASC report did not show a failure rate for the first semester of the 2009-10 school year but based on the data for 2010-11 it is reasonable to assume that the failure rate was between 46% and 50%. Hence, I will assume that at least 300 students failed the first semester as well and were socially promoted to the second semester course in Algebra 1 where the documented failure rate was 50.1%.

The graph presented in Figure 8 summarizes the analysis results for the 2009-10 school year. The graph is derived from data in Table 1. The "ADA" bar shows the amount of funds the school would receive for all Algebra 1 and geometry ninth grade students based on attendance.

As a result of administrators' decisions to reenroll most ninth graders in Algebra 1, fifty percent of the students failed. In addition, all first semester Algebra 1 students (pass and fail) are promoted to the second semester where according to the WASC report, 51.1% of them will fail. In summary, at the end of the 2009 school year, 94% or an equivalent $718,003 of the current year's math ADA are committed to students failing Algebra 1 in 2009-10. (This amount may be lower depending on whether the students failed one or both semesters). Unfortunately, many of these students will fail more than once during their tenure at LHS as shown in the five cases above and in transcripts presented in Appendix B.

Forty-one percent of the funds are used for students reenrolled in Algebra 1 after taking (and passing) the course in eighth grade. The 41% or $314,800 was committed to re-teaching a class which students have already passed instead of moving them forward into geometry or Algebra 2. In total, administrators' class programming decisions have consumed 87% of 2009 ADA for Algebra 1 and geometry in avoidable failures and re-teaching unnecessary classes.
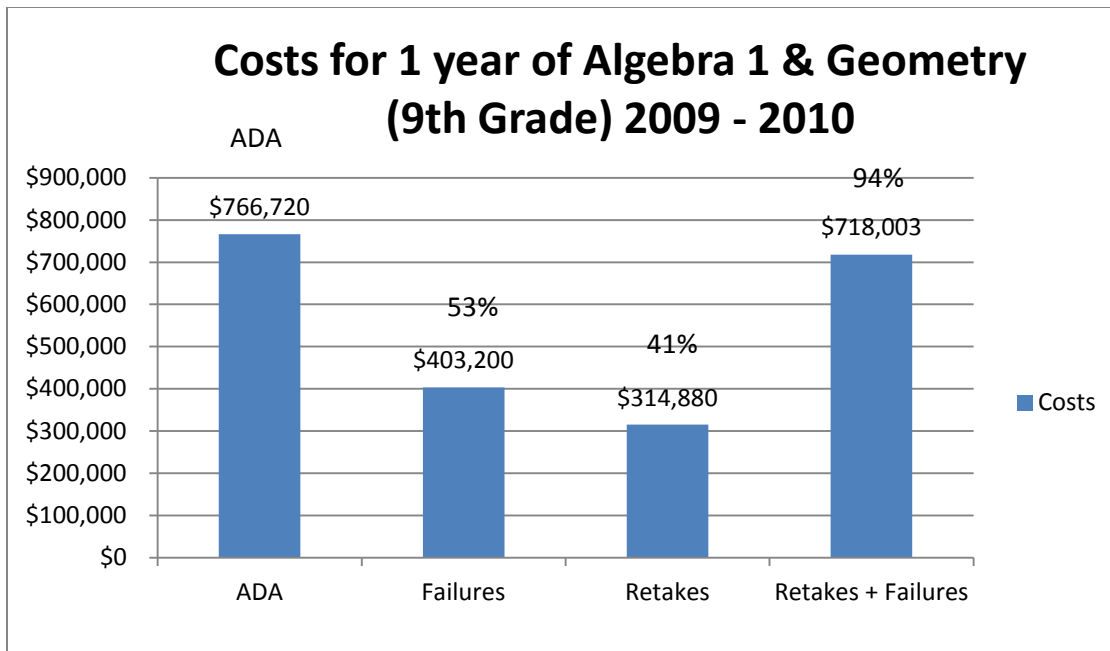
Figure 8: Distribution of ADA for Alg.1 2009-10

Only 6% or $58,000 of $766,720 in ADA was used to move students forward. Or if one believes that retaking Algebra 1 was helpful then the percentage rises to 47%. The complete data table is presented in the Appendix A as Table 1.

Year 2: 2010 - 2011

Figure 9 summarizes results for tenth graders, only, enrolled in geometry and Algebra 2 during the 2010-11 school year. The graphs are derived from data in Table 2 of Appendix A. The "failures" bar in Figure 9 represents repeat Algebra 1 and geometry students who failed these classes as ninth graders.

While a majority of geometry and Algebra 2 students are first time enrollees and are therefore moving *forward* a significant cost *burden* is following this class. The 2009 class saw approximately $403,200 embedded in future ADA allotments for failed Algebra 1 students (9th grade). Some of those funds are used by the 158 students ($101,120) to retake Algebra 1 leaving approximately $301,000 for re-teaching failed students from 2009 in future years. This sum grows to approximately *$516,000* when $215,040 (336 additional failed students) is added due to failure rates of the two classes: Algebra 2 and geometry.

The phenomena at work here is akin to snowball rolling downhill. The fails keep mounting each semester for the fall 2009 class. After three semesters, this class of 660 students has at least 336 failures and growing. All the failures may not represent individual students since a student can fail two semesters in one class or more in mathematics over a school year. However, the 336 failures represent a conservative number of reenrollments in math classes only.

In addition from 2009, there is potentially $301,000 in failure costs. Or 200 plus students have to repeat one or both semesters of Algebra 1and/or geometry during their last two years of high school. The net effect of current policies of social promotion and class programming is to cause a backlog of funds to be spent on repeat school work for the fall 2009 class in future years; funds that are allocated to moving students forward are spent trying to "***catch them up***".
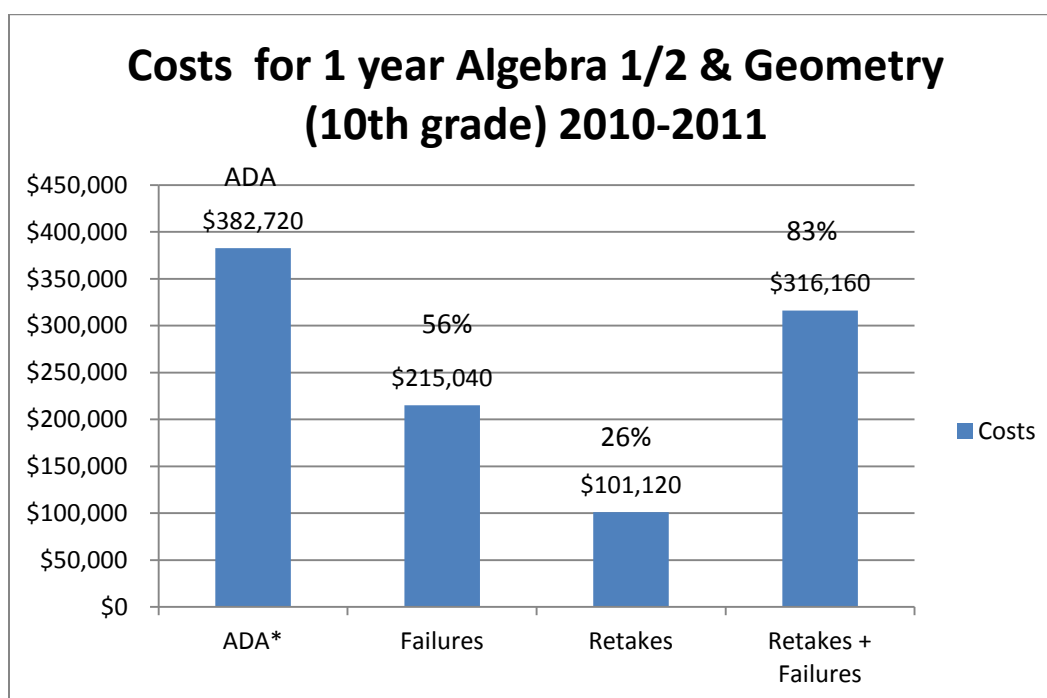
Figure 9: Distribution of Costs 2010-11(10th grade only)

Figure 10 shows the summary analysis for new ninth graders entering 2010-11. The spring CST 2011 showed 609 students tested in Algebra 1, geometry, and Algebra 2; that number is used as the official enrollment in these classes for the calculation in Table 3 (Appendix A). According to district policies, eighty percent (80%) or 493 of the students are repeating Algebra 1 in grade nine. Using the

school's failure rate data, 41% of the students will fail one of the three subjects the first semester and 51% the second semester or the equivalent of $360,704 in future ADA monies shown in Table 3.

The amount spent on students retaking Algebra 1 (493 students) is $315,520 due to district policies bringing the total funds *wasted* to $674,224 or 87% of the allocated ADA budget for these students.

District/school administrative policies created this circumstance. Students retaking Algebra 1, especially those who performed above average in grade 8, had a year of advancement in math instruction wasted by repeating the course. Students who were reenrolled after failing Algebra 1 in grade eight faced the prospect of failing at a 50% rate; meaning they would have to repeat the course again. A more sensible solution is to offer a transitional math course designed to remedy basic skills deficiencies. I have made a concerted argument for such a course but the administration is steadfast against such a proposal. It appears that such a class does not fit the "college preparatory mission" storyline.

Costs for 1 year of Algebra 1 & Geometry (9th Grade) 2010- 2011

	Costs
ADA	$779,502
Failures (47%)	$364,160
Retakes (40%)	$315,520
Retakes + Failures (87%)	$679,418
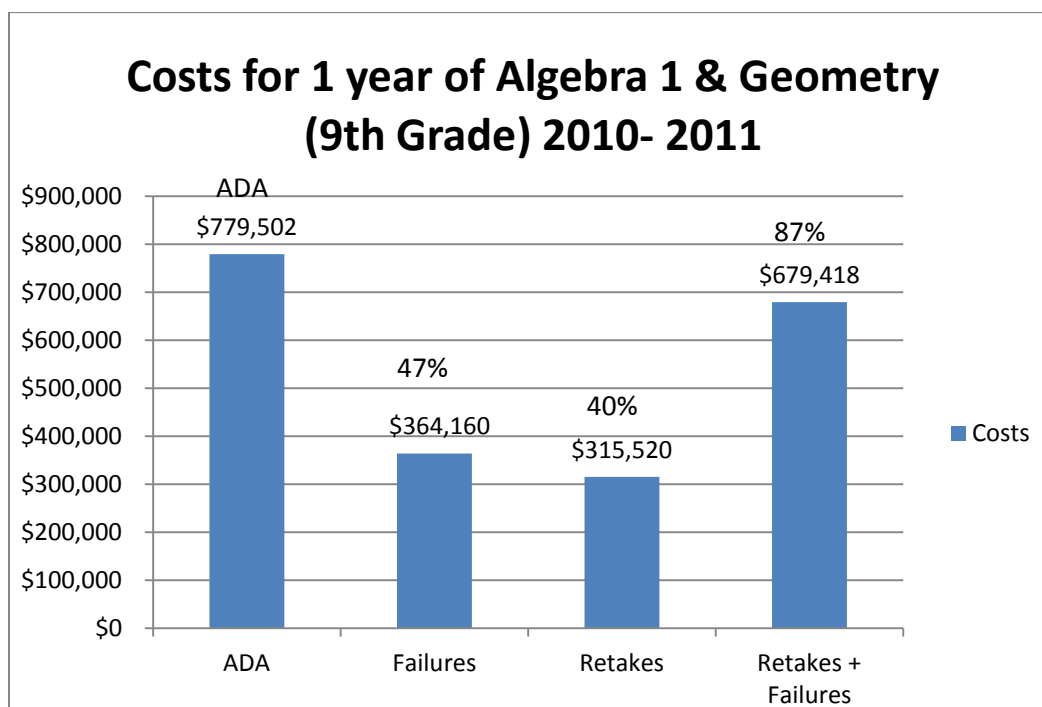
Figure 10: Distribution of Costs for 9th Graders 2010-11

Figure 11 shows the ADA costs for 9th and 10th grade students for the fall 2009 and 2010 classes, respectively, enrolled in Algebra 1 and 2 and geometry during the 2010-11 school year. ADA funding for these three courses totals $1,162,222. Eighty-six percent, 86%, of these funds are spent on students who have failed or are retaking one or more of these courses.

Combined Costs for Algebra 1/2 & Geometry (9th & 10th Grade) 2010-2011

ADA $1,162,222

86% $998,578

50% $579,200

36% $416,640

Costs

(x-axis: ADA, Failures, Retakes, Retakes + Failures)
(y-axis: $0 to $1,400,000)
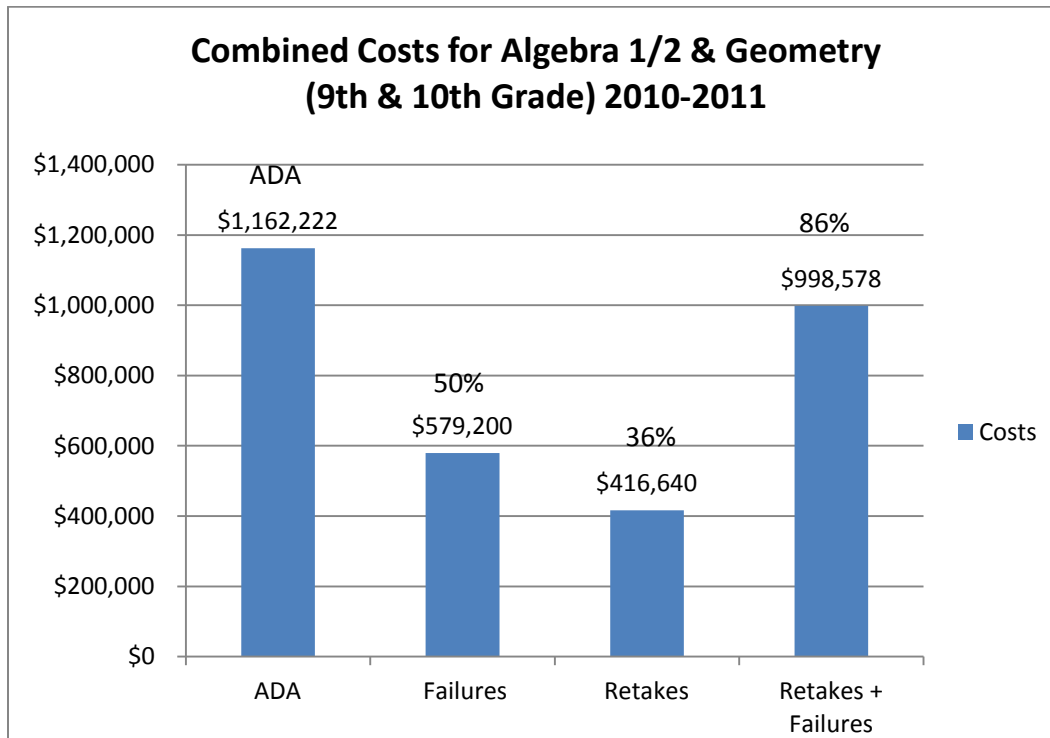
Figure 11: Combined Grade 9 & 10 for 2010-11

Finally, Figure 12 shows the cumulative costs for the fall class of 2009 and 2010. The school has allocated $1,928, 942 to these two classes for math instruction. The school policy of reenrolling new ninth graders into Algebra 1, even those students who passed the course as eighth graders, cost $731,520 (38%) of the funds. The waste of these funds is avoidable with more intelligent programming of students. The 50% plus failure rate is also wasteful providing evidence of poor basic math skills instruction during the elementary years for a number of reasons.

Instituting early interventions to improve basic math skills during grades four through six would help. The information is available (thru CST results) for administrators telling them which groups of students need additional support and teachers know which students, in particular, need additional support. But as the

numbers show it is not happening. As a result, 89% of funds to educate students are being consumed in re-teaching failure, reenrolling in unnecessary classes and causing more failure, lower graduation rates, and frustrating students.

Cumulative Costs for Fall Class 2009

	ADA	Failures	Retakes	Retakes + Failures
Cost	$1,928,942	$982,400	$731,520	$1,713,581
Percentage	ADA	51%	38%	89%
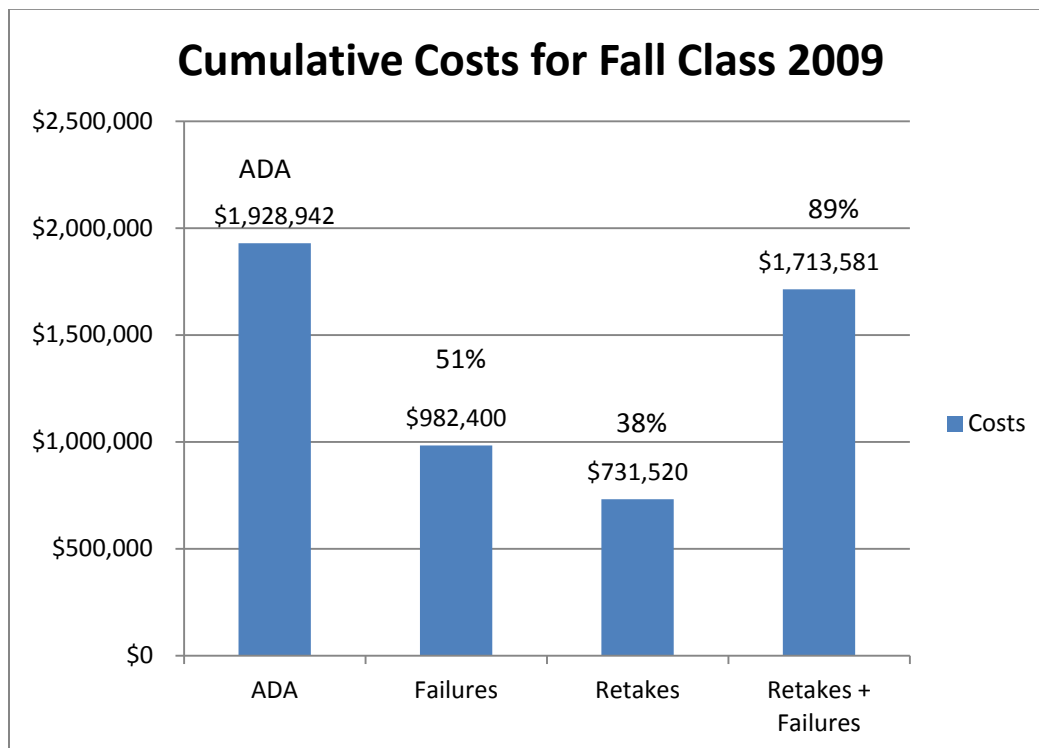
Figure 12: Cumulative ADA Costs Over Two Years

What Should Be Done

From the analysis above it is apparent that the current policies and procedures used by the LUSD are not benefitting a majority of students. I propose three plans to correct this catastrophe of education. First, institute an afterschool mandatory tutoring program for identified low-performing math students in the elementary grades. This should be augmented with a Saturday school program emphasizing math skills and concepts. Second, seventh grade students should be given a standards based assessment test which determines which students should advance to Algebra 1 or to a GM 8/transition math class to enhance math skills. Third, stop requiring successful students repeat Algebra 1 in grade nine. If a student fails Algebra 1 in grade eight indicating they are deficient in basic math skills, enroll them into a *transition math* class that emphasizes basic math skills

improvement while linking to algebra and geometry concepts. Fourth, stop social promotion. Fifth, create a system which rewards for success, not failure. The current system of school improvement grants based on year-to-year failure motivates incompetent and inept administrators to continue policies which promote low performance: hiring consultants, enacting gimmicky programs focused on non-critical subject matter, minimizing curriculum to limit options for students, and refusing to initiate meaningful alternatives to address student deficiencies. Current administrative policies hinder low-performing math students: discourages students, punishes high-achievers, and limits student preparation for college.

Summary

Low- performing math students exist for a myriad of reasons but the reasons for not addressing their problems must lie at the feet of district and school administrators, teachers, parents, and students. Data from standardized tests is developed year after year showing the student achievement levels in core courses. Whether one believes in the validity of standardized tests or not, the data when correlated with class performance is undeniable. The growth in BB/FBB students as well as the decline in the numbers of high achievers during the elementary school years is apparent. The warning signs are there for all to see: parents, school officials, and students themselves. When school districts allow low-skilled students to progress to middle school and beyond without vigorous intervention and remedial programs they are fostering a failed system and a failed student.

Shrinking budgets do not relieve administrators of the responsibility to provide a meaningful education to our students. Social promotion policies are harming students and wasting funds. Graduation rates are falling and those that graduate do not possess the prerequisites for real success at the college level. School administrators have created a minimalist approach to education, a box, in which all students must perform at an unrealistic level without allowing for deficiencies in teaching, student preparedness, or systemic failure. This process is not serving our students at any level.

Figure 13 recaps the path of the fall class 2009. Fifty-eight students and 168 students were still enrolled in Algebra 1 and geometry, respectively, beginning their 11th grade year. Unfortunately, the WASC report indicates some will also be enrolled in those same classes beginning their senior year, fall 2012.
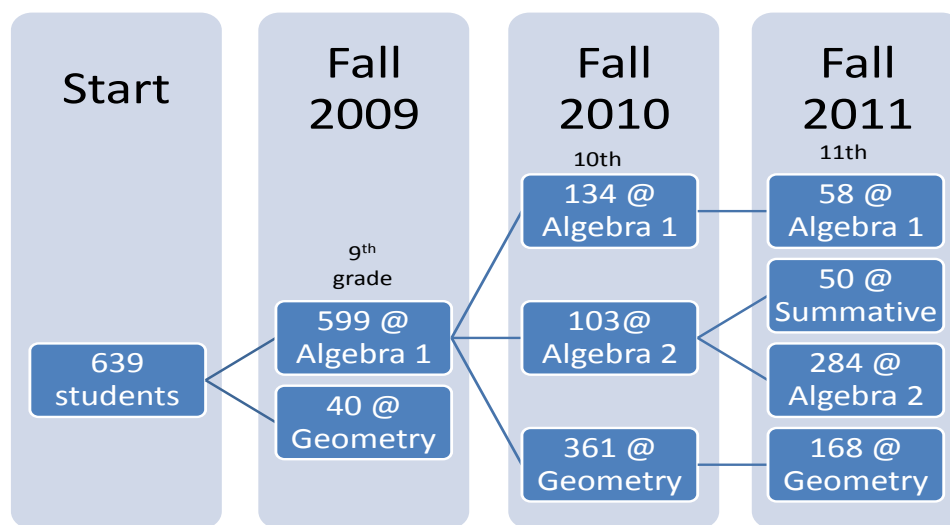
Figure 13: Path of Fall Class 2009

These students are, to a large extent, the result of a policy requiring them to retake Algebra 1 in the 2009-10 school year. (Recall that the 2011 CST results for 11th graders in Algebra 1 were 88% BB and FBB). The students have not improved in subgroup performance (Figure 14) and have sustained low marks in math courses most of their high school career. (See Appendix B: Transcripts).

As can be seen from Figure 14, students' scores have declined in most cases as the student progressed to more difficult math courses. Algebra 1 students, 75% BB/FBB in grade nine are still in the BB/FBB subgroups in grade ten whether they are enrolled in Algebra 1, Algebra 2, or geometry.
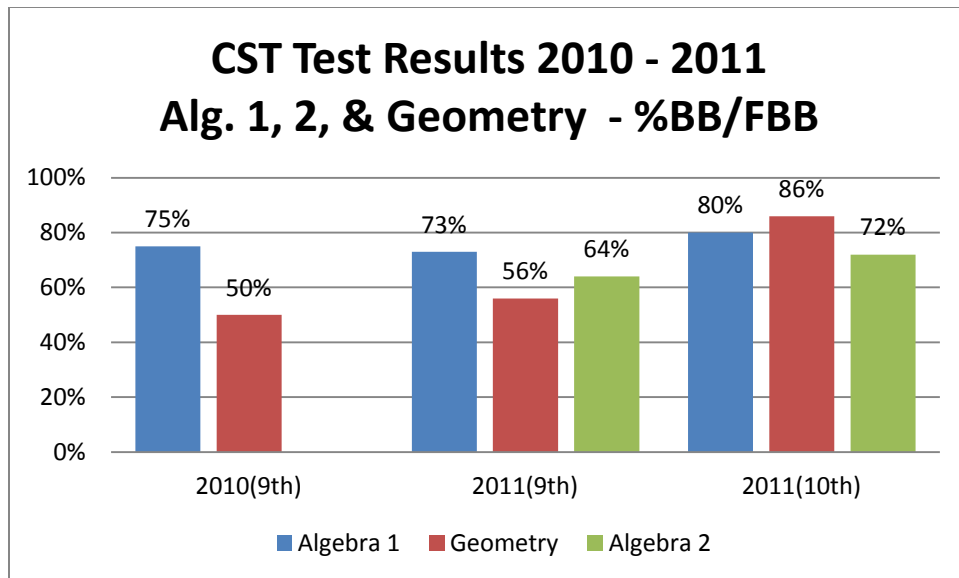
Figure 14: Percent BB/FBB for Class 2009

As to cost, the analyses has shown that **89%** of the allocated ADA has been spent re-teaching the class of 2009 either through retaking courses they should not take or from failure. The waste of educational dollars, especially during a period of budget deficits at the state and local levels, is a tragedy that can be avoided if administrators at the district and school level open their minds to new ideas and begin to address the real issues of low-achieving students' performance in mathematics as well as other courses.

A recent article appeared in **USA Today: "**Poverty Not the Only Factor Hindering Urban Schools":

USA Today (7/16, 1.78M), Richard Whitmire, author of "The Bee Eater: Michelle Rhee Takes on the Nation's Worst School District," writes that the ACLU is suing the state of Michigan and a school district "for failing to educate children," noting that the action draws attention to the debate over whether poverty or "bad teaching" is responsible for poor educational outcomes in urban areas. Whitmire writes that his research into former DC Schools Chancellor Michelle Rhee's reform efforts indicates that though poverty is a factor, "a failure to teach appeared to be an equally powerful player."....

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APPENDIX A

Table 1: Cost Data for 2009 -2010

YEAR	1ST SEMESTER						
2009-2010 9th Gr. Only	#Enrolled	#Retakes	Retake costs Col 3*$640	Failure Rate	#Fails Col. 1 * Col. 5	Failure Costs Col. 6 * $640	Total Col. 4 + Col7
Algebra 1	599	492	$314,880	50%	300	$192,000	$506,880
Geometry	40	0	0	28%	11	$7,168	$7,168
Subtotal	639	492	$314,880		311	$199,168	$514,048
	2nd Semester						
Algebra 1	599	0	0	51.1%	306	$195,840	$195,840
Geometry	40	0	0	31.7%	13	$8,115	$8,115
Subtotal	639	0	0		319	$203,955	$203,955
Total (year)	639	492	$314,880		630	$403,200	$718,003

The total costs (ADA expected income) for 639 (multiply each student by $640 per course) students are $408,960 for students enrolled in Algebra 1 and geometry. The data above does not account for students other than ninth graders enrolling in second semester Algebra 1 or geometry after having failed previously. At least 311 students will be repeating these courses during the next three years.

YEAR	1ST SEMESTER						
2010-2011 10th Gr. Only	#Enrolled	#Retakes	Retake costs Col 3*$640	Failure Rate	#Fails Col. 1 * Col. 5	Failure Costs Col. 6 * $640	Total Col. 4 + Col7
Algebra 1	134*	134	$85,760	46.5%	62	$39,680	$125,440
Geometry	361	24**	$15,360	17.6%	64	$40,960	$56,320
`Algebra 2	103	0	0	23.8%	24	$15,360	$15,360
Subtotal	598	158	$101,120		150	$96,000	$197,120
	2nd Semester						
Algebra 1	134	0	0	56.7%	76	$48,640	$48,640
Geometry	361	0	0	21.5%	78	$49,920	$49,920
Algebra 2	103	0	0	31%	32	$20,480	$20,480
Subtotal	598	0	0		186	$119,040	$119,040
Total (year)	598	158	$101,120		336	$215,040	$316,160

*The 134 students in Alg. 1 are assumed to be repeat students from Grade 9.
**Geometry students who failed as 9th graders comprise this group.

Tenth grade students in geometry and Alg. 2 are comprised of students who were socially promoted (at least 170 students) after failing at least one semester of Alg.1 plus those who successfully completed two semesters of Alg.1. Students who fail during the year 2010 – 2011 (497) will repeat these courses the following year(s) moving the costs to 2011 -2012 or beyond in order to complete graduation requirements.

The costs associated with incoming ninth graders are subjected to the same analysis in Table 3 below. All Algebra 1 students are assumed to be repeat students since they have taken Algebra 1 as eighth graders within the district. More students were placed in geometry and Algebra 2 as the district's class programming guidelines were followed; however, they are many cases in which students who successfully completed eighth grade Algebra 1 were once again reenrolled in Algebra 1 in the ninth grade.

Table 3 Cost Data for 2010 – 2011 9th Grade Only

YEAR	1ST SEMESTER						
2010-2011 9th Gr. Only	#Enrolled	#Retakes	Retake costs Col 3*$640	Failure Rate	#Fails Col. 1 * Col. 5	Failure Costs Col. 6 * $640	Total Col. 4 + Col7
Algebra 1	493	493	$315,520	46.5%	229	$146,560	$462,080
Geometry	27	0	0	17.6%	5	$3,200	$3,200
Algebra 2	89	0	0	23.8%	21	$13,440	$13,440
Subtotal	609	493	$315,520		255	$163,200	$478,720
	2nd Semester						
Algebra 1	493	0	0	56.7%	280	$179,200	$179,200
Geometry	27	0	0	21.5%	6	$3,840	$3,840
Algebra 2	89	0	0	31%	28	$17,920	$17,920
Subtotal	609	0	0		314	$197,504	$197,504
Total (year)	609	493	0		569	$360,704	$676,224

The total costs provided to teach the math courses in Table 3 are $779,520 for two semesters in grade 9. The tenth grade costs are $765,440 for a total of $1,544,960. The combined 9th and 10th grade costs are $1,022,838 for reteaching current and future failed students. That is **66.2%** of the allocated ADA will be spent reteaching low achieving students based on current administrator guidelines. This number will continue to grow as the next group of ninth graders enters the school. Also, the analysis does not include eleventh graders who are also repeating classes and are part of the 2009 entering class which recently completed the CST. (CST results will not be available until Sept. 2012).

Appendix B: Transcripts

Case 1: Student A: Repeat Alg. 1 Gr 9 and Fails

Note: Student failed Algebra 1 Honors during the ninth grade. Student then enrolled in Geometry Honors, failed second semester while also enrolled in Algebra 1.

	Crs-ID	Course Title	Mark	Att	Cmp
		Grade 9 Fall 2008-2009			
		Lynwood High School East			
+ p	0112	English 09 G/H	B-	5.00	5.00
+ p	0312	Algebra 1 G/H	F	5.00	0.00
+ p	0422	Biology G/H	D	5.00	5.00
	0460	Health	B	5.00	5.00
p	0551	Drama 1	C	5.00	5.00
*	0601	PE 09	A	5.00	5.00
	Credit Att: 30.00 Cmp: 25.00 TGPA: 2.50				
		Grade 9 Spring 2008-2009			
		Lynwood High School East			
+ p	0112	English 09 G/H	A-	5.00	5.00
+ p	0312	Algebra 1 G/H	F	5.00	0.00
+ p	0422	Biology G/H	C	5.00	5.00
p	0551	Drama 1	B	5.00	5.00
*	0601	PE 09	A-	5.00	5.00
	0951	Intro Comp	A	5.00	5.00
	Credit Att: 30.00 Cmp: 25.00 TGPA: 3.17				
		Grade 10 Fall 2009-2010			
		Lynwood High School East			
+ p	110151	World History H A	C	5.00	5.00
+ p	200151	English 10 H A	C+	5.00	5.00
p	310041	Algebra I A	A	5.00	5.00
+ p	330151	Geometry H A	D	5.00	5.00
+ p	440271	Microbiology AP	B+	5.00	5.00
+ p	511101	Spanish Native I	C	5.00	5.00
	750000	Assistant-Tchr	B	5.00	5.00
*	900050	PE 10	A-	5.00	5.00
	Credit Att: 40.00 Cmp: 40.00 TGPA: 3.25				
		Grade 10 Spring 2009-2010			
		Lynwood High School East			
+ p	110152	World History H B	C-	5.00	5.00
+ p	200152	English 10 H B	F	5.00	0.00

	Crs-ID	Course Title	Mark	Att	Cmp
p	310042	Algebra I B	D	5.00	5.00
+ p	330152	Geometry H B	F	5.00	0.00
p	440272	Microbiology AP	C	5.00	5.00
+ p	511102	Spanish Native I	C	5.00	5.00
	750000	Assistant-Tchr	B	5.00	5.00
*	900050	PE 10	B	5.00	5.00
	Credit Att: 40.00 Cmp: 30.00 TGPA: 1.88				
		Grade 10 Summer 2009-2010			
		Lynwood High School Summer School			
p	200051	English 10A	NC	5.00	0.00
p	330051	Geometry A	C	5.00	5.00
	Credit Att: 10.00 Cmp: 5.00 TGPA: 2.00				
		Grade 11 Fall 2010-2011			
		Lynwood High School East			
+ p	120261	US History AP A	D	5.00	5.00
+ p	200161	English 11 H A	F	5.00	0.00
+ p	320141	Alg II/Trig H A	F	5.00	0.00
+ p	410151	Chemistry H-A	C	5.00	5.00
+ p	515201	Spanish LangAP	C	5.00	5.00
+ p	739200	Psychology AP	C	5.00	5.00
	Credit Att: 30.00 Cmp: 20.00 TGPA: 1.83				
		Grade 11 Spring 2010-2011			
		Lynwood High School East			
+ p	120262	US History AP B	C+	5.00	5.00
+ p	200162	English 11 H B	B-	5.00	5.00
+ p	320142	Alg II/Trig H B	F	5.00	0.00
+ p	410152	Chemistry H-B	C	5.00	5.00
+ p	515202	Spanish LangAP	C	5.00	5.00
+ p	739200	Psychology AP	C+	5.00	5.00
	Credit Att: 30.00 Cmp: 25.00 TGPA: 2.67				
		Grade 11 Summer 2010-2011			
		Lynwood High School Summer School			
p	B00061	English 11 A	D+	5.00	5.00

	Crs-ID	Course Title	Mark	Att	Cmp
	Credit Att: 5.00 Cmp: 5.00 TGPA: 1.00				
	--WORK IN PROGRESS--				
	Lynwood High School East				
+ p	A30773	Government H		5.00	0.00
+ p	B00771	English 12 H A		5.00	0.00
p	C20001	Algebra 2 A		5.00	0.00
p	D40601	Chemistry A		5.00	0.00
	F44100	Cmptr Graphics1		5.00	0.00
	G02001	Journalism A		5.00	0.00
	Total credit: 30.00				

Case 2: Student B: Repeat Alg. 1, fails Alg. 2

Note: This student fails Algebra 1 second semester of grade 9 and enrolls in geometry in the tenth grade. The student repeats Algebra 1, spring 2010. Enrolls in Algebra 2 and fails the first semester.

Crs-ID	Course Title	Mark	Att/Cmp
	Grade 9 Fall 2008-2009		
	Lynwood High School East		
p 0111	English 09	F	5.00 0.00
p 0311	Algebra 1	D	5.00 5.00
p 0506	Span Native 1	A	5.00 5.00
p 0570	Art 1	C	5.00 5.00
* 0601	PE 09	A	5.00 5.00
0951	Intro to Comp	C	5.00 5.00
Credit Att: 30.00 Cmp: 25.00 TGPA: 2.17			
	Grade 9 Spring 2008-2009		
	Lynwood High School East		
p 0111	English 09	F	5.00 0.00
p 0311	Algebra 1	F	5.00 0.00
0460	Health	D	5.00 5.00
p 0506	Span Native 1	C	5.00 5.00
p 0570	Art 1	F	5.00 0.00
* 0601	PE 09	A	5.00 5.00
Credit Att: 30.00 Cmp: 15.00 TGPA: 1.17			
	Grade 10 Fall 2009-2010		
	Lynwood High School East		
p 110051	World History A	D	5.00 5.00
p 202051	English 10 ELM A	B+	5.00 5.00
p 330051	Geometry A	D	5.00 5.00
p 400041	Biology A	C	5.00 5.00
p 512001	Spanish Native II	B	5.00 5.00
741050	Study Skills 10	B	5.00 5.00
742050	Support-ELA 10	B+	5.00 5.00
* 900050	PE 10	A+	5.00 5.00
Credit Att: 40.00 Cmp: 40.00 TGPA: 2.50			
	Grade 10 Spring 2009-2010		
	Lynwood High School East		
p 110052	World History B	F	5.00 0.00
p 202052	English 10 ELM B	C	5.00 5.00

Crs-ID	Course Title	Mark	Att/Cmp
p 310042	Algebra I B	D	5.00 5.00
p 330052	Geometry B	D	5.00 5.00
p 400042	Biology B	C	5.00 5.00
p 512002	Spanish Native II	D-	5.00 5.00
742050	Support-ELA 10	C	5.00 5.00
* 900050	PE 10	A+	5.00 5.00
Credit Att: 40.00 Cmp: 35.00 TGPA: 1.63			
	Grade 11 Fall 2010-2011		
	Lynwood High School East		
p 120061	US History A	B	5.00 5.00
p 200061	English 11A	D-	5.00 5.00
p 320051	Alg 2/Trig A	F	5.00 0.00
p 410051	Chemistry A	D	5.00 5.00
+ p 514201	Spanish Lit APA	F	5.00 0.00
p 601001	3D Art History IA	D	5.00 5.00
Credit Att: 30.00 Cmp: 20.00 TGPA: 1.00			
	Grade 11 Spring 2010-2011		
	Lynwood High School East		
p 120062	US History B	B+	5.00 5.00
p 200062	English 11B	D+	5.00 5.00
p 320052	Alg 2/Trig B	D-	5.00 5.00
p 410052	Chemistry B	C-	5.00 5.00
+ p 514202	Spanish Lit APB	C	5.00 5.00
p 601002	3D Art History IB	C	5.00 5.00
	Lynwood Adult		
p 200052	English 10B	C	5.00 5.00
Credit Att: 35.00 Cmp: 35.00 TGPA: 2.00			
	Grade 11 Summer 2010-2011		
	Lynwood High School Summer School		
p A10052	World History B	D+	5.00 5.00
Credit Att: 5.00 Cmp: 5.00 TGPA: 1.00			
	--WORK IN PROGRESS--		
	Lynwood High School East		

Crs-ID	Course Title	Mark	Att/Cmp
p A30073	Government		5.00 0.00
p B00041	English 9 A		5.00 0.00
p B00071	English 12 A		5.00 0.00
p C20001	Algebra 2 A		5.00 0.00
F45101	Photography 1 A		5.00 0.00
R04100	Food Ed 1		5.00 0.00
	Total credit: 30.00		

Case 3: Student C: Fails Alg. 2 & Geo & CAHSEE

Note: Student enrolled as an English language learner in Algebra 1. Student enrolled in geometry and Algebra 2 in tenth grade and failed both classes

Crs-ID	Course Title	Mark	Att/Cmp		Crs-ID	Course Title	Mark	Att/Cmp		Crs-ID	Course Title	Mark	Att/Cmp
	Grade 9 Fall 2008-2009					**M.A. Firebaugh H.S.**			p	B00071	English 12 A		5.00 0.00
	M.A. Firebaugh H.S.			p	112052	World History EL	C	5.00 5.00	p	C20001	Algebra 2 A		5.00 0.00
0117	Eng 09 SDAIE	C-	5.00 5.00	p	201052	English 10 SEI B	F	5.00 0.00	p	C30001	Geometry A		5.00 0.00
0319	Algebra 1 Suppor	C	5.00 5.00	p	322052	AlgebraII ELM B	F	5.00 0.00	p	D40001	Chemistry A		5.00 0.00
0460	Health	F	5.00 0.00	p	332052	Geometry ELM B	F	5.00 0.00		G25001	CAHSEE-Math A		5.00 0.00
p 0506	Span Native 1	C-	5.00 5.00	p	402052	Biology ELM B	C	5.00 5.00			**Total credit: 30.00**		
* 0601	PE 09	F	5.00 0.00	p	512002	Spanish Native II	B	5.00 5.00					
0702	Eld 2	C-	5.00 5.00		742050	Support-ELA 10	F	5.00 0.00					
0724	Algebra 1 SDAIE	C	5.00 5.00	*	900050	PE 10	A	5.00 5.00					
	Credit Att: 35.00 Cmp: 25.00 TGPA: 1.43				**Credit Att: 40.00 Cmp: 20.00 TGPA: 1.38**								
	Grade 9 Spring 2008-2009				**Grade 10 Summer 2009-2010**								
	M.A. Firebaugh H.S.				**Firebaugh High School Summer School**								
0117	Eng 09 SDAIE	C	5.00 5.00	p	200051	English 10A	C-	5.00 5.00					
0319	Algebra 1 Suppor	C	5.00 5.00		**Credit Att: 5.00 Cmp: 5.00 TGPA: 2.00**								
p 0506	Span Native 1	C	5.00 5.00		**Grade 11 Spring 2010-2011**								
* 0601	PE 09	C	5.00 5.00		**Lynwood High School East**								
0702	Eld 2	C-	5.00 5.00	p	120062	US History B	B	5.00 5.00					
0724	Algebra 1 SDAIE	C	5.00 5.00	p	200062	English 11B	F	5.00 0.00					
0951	Intro Comp	B-	5.00 5.00	p	602002	Art IB	C+	5.00 5.00					
	Credit Att: 35.00 Cmp: 35.00 TGPA: 2.14				725000	CAHSEE-ELA	B	5.00 5.00					
	Grade 10 Fall 2009-2010				726000	CAHSEE-Math	A	5.00 5.00					
	M.A. Firebaugh H.S.			*	900050	PE 10	A+	5.00 5.00					
p 112051	World History EL	C	5.00 5.00		**Lynwood Adult**								
p 201051	English 10 SEI A	F	5.00 0.00	p	200042	English 9B	D	5.00 5.00					
p 322051	AlgebraII ELM A	F	5.00 0.00		**Credit Att: 35.00 Cmp: 30.00 TGPA: 2.43**								
p 332051	Geometry ELM A	F	5.00 0.00		**Grade 11 Summer 2010-2011**								
p 402051	Biology ELM A	C-	5.00 5.00		**Lynwood High School Summer School**								
p 512001	Spanish Native II	C	5.00 5.00	p	B00052	English 10 B	B	5.00 5.00					
734000	Intervention-ELA	F	0.00 0.00	*	P00050	PE 10	B	5.00 5.00					
742050	Support-ELA 10	F	5.00 0.00		**Credit Att: 10.00 Cmp: 10.00 TGPA: 3.00**								
* 900050	PE 10	A-	5.00 5.00		**--WORK IN PROGRESS--**								
	Credit Att: 40.00 Cmp: 20.00 TGPA: 1.25				**Lynwood High School East**								
	Grade 10 Spring 2009-2010			+p	A30773	Government H		5.00 0.00					

Case 4: Student failed ALg.1B & Geo. 4 times.

Note: Student failed Algebra 1 second semester in the ninth grade. In the tenth grade student failed both semesters of geometry and failed geometry again as an eleventh grader.

	Crs-ID	Course Title	Mark	Att	Cmp
		Grade 9 Fall 2008-2009			
		Lynwood High School East			
	0117	Eng 09 SDAIE	D	5.00	5.00
p	0311	Algebra 1	D	5.00	5.00
p	0421	Biology	C	5.00	5.00
p	0506	Span Native 1	F	5.00	0.00
*	0601	PE 09	A	5.00	5.00
	0951	Intro to Comp	D	5.00	5.00
		Credit Att: 30.00 Cmp: 25.00 TGPA: 1.50			
		Grade 9 Spring 2008-2009			
		Lynwood High School East			
	0117	Eng 09 SDAIE	F	5.00	0.00
p	0311	Algebra 1	F	5.00	0.00
p	0421	Biology	D	5.00	5.00
	0460	Health	D	5.00	5.00
p	0506	Span Native 1	F	5.00	0.00
*	0601	PE 09	C	5.00	5.00
		Credit Att: 30.00 Cmp: 15.00 TGPA: 0.67			
		Grade 10 Fall 2009-2010			
		Lynwood High School East			
p	110051	World History A	C	5.00	5.00
p	201051	English 10 SEI A	F	5.00	0.00
p	331051	Geometry SEI A	F	5.00	0.00
p	410051	Chemistry A	C	5.00	5.00
p	511001	Spanish Native I	D	5.00	5.00
	742050	Support-ELA 10	F	5.00	0.00
	743050	Support-Math 10	C-	5.00	5.00
*	900050	PE 10	A-	5.00	5.00
		Credit Att: 40.00 Cmp: 25.00 TGPA: 1.38			
		Grade 10 Spring 2009-2010			
		Lynwood High School East			
p	110052	World History B	F	5.00	0.00
p	201052	English 10 SEI B	F	5.00	0.00

	Crs-ID	Course Title	Mark	Att	Cmp
p	331052	Geometry SEI B	F	5.00	0.00
p	410052	Chemistry B	F	5.00	0.00
p	511002	Spanish Native I	F	5.00	0.00
	742050	Support-ELA 10	F	5.00	0.00
	743050	Support-Math 10	F	5.00	0.00
*	900050	PE 10	A	5.00	5.00
		Credit Att: 40.00 Cmp: 5.00 TGPA: 0.50			
		Grade 11 Fall 2010-2011			
		Lynwood High School East			
p	120061	US History A	F	5.00	0.00
p	200061	English 11A	D-	5.00	5.00
p	330051	Geometry A	F	5.00	0.00
p	602001	Art IA	F	5.00	0.00
	725000	CAHSEE-ELA	D	5.00	5.00
	726000	CAHSEE-Math	D	5.00	5.00
	810000	ChildCareROP(C	A	5.00	5.00
		Credit Att: 35.00 Cmp: 20.00 TGPA: 1.00			
		Grade 11 Spring 2010-2011			
		Lynwood High School East			
p	120062	US History B	D-	5.00	5.00
p	200062	English 11B	D-	5.00	5.00
p	330052	Geometry B	F	5.00	0.00
p	602002	Art IB	B-	5.00	5.00
	725000	CAHSEE-ELA	D	5.00	5.00
	726000	CAHSEE-Math	D-	5.00	5.00
		Lynwood Adult			
p	200042	English 9B	C	5.00	5.00
p	531002	Spanish I B	D	5.00	5.00
		Credit Att: 40.00 Cmp: 35.00 TGPA: 1.25			
		Grade 11 Summer 2010-2011			
		Lynwood High School Summer School			
p	C30001	Geometry A	B-	5.00	5.00
p	D40002	Chemistry B	F	5.00	0.00

	Crs-ID	Course Title	Mark	Att	Cmp
		Credit Att: 10.00 Cmp: 5.00 TGPA: 1.50			
		--WORK IN PROGRESS--			
		Lynwood High School East			
p	A20061	US History A		5.00	0.00
p	A30073	Government		5.00	0.00
p	B00071	English 12 A		5.00	0.00
p	C20001	Algebra 2 A		5.00	0.00
p	E22001	Span Native 2 A		5.00	0.00
	G26001	CAHSEE-ELA A		5.00	0.00
		Total credit: 30.00			

Case 5: Student enrolled in Alg. 2 before Alg.1

Note: Student enrolled and failed Algebra 2 before taking Algebra 1. Student also failed geometry. Student enrolled in Algebra 1, passed first semester. The student then reenrolled in Algebra 1 first semester again, passed; then enrolled in second semester course and failed.

Crs-ID	Course Title	Mark	Att/Cmp	
	Grade 9 Fall 2008-2009			
	Lynwood High School East			
p 0111	English 09	F	5.00	0.00
0460	Health	F	5.00	0.00
p 0501	Spanish 1	A	5.00	5.00
0578	Creative Animatio	B+	5.00	5.00
* 0601	PE 09	A	5.00	5.00
	Credit Att: 25.00 Cmp: 15.00 TGPA: 2.20			
	Grade 9 Spring 2008-2009			
	Lynwood High School East			
p 0111	English 09	F	5.00	0.00
p 0321	Geometry	C	5.00	5.00
p 0421	Biology	D	5.00	5.00
0460	Health	F	5.00	0.00
p 0501	Spanish 1	A	5.00	5.00
0578	Creative Animatio	A-	5.00	5.00
* 0601	PE 09	B-	5.00	5.00
	Credit Att: 35.00 Cmp: 25.00 TGPA: 2.00			
	Grade 10 Fall 2009-2010			
	Lynwood High School East			
p 110051	World History A	D	5.00	5.00
p 201051	English 10 SEI A	D	5.00	5.00
p 320051	Alg 2/Trig A	F	5.00	0.00
p 331051	Geometry SEI A	F	5.00	0.00
p 400041	Biology A	D	5.00	5.00
742050	Support-ELA 10	D	5.00	5.00
743050	Support-Math 10	C-	5.00	5.00
* 900050	PE 10	B-	5.00	5.00
	Credit Att: 40.00 Cmp: 30.00 TGPA: 1.13			
	Grade 10 Spring 2009-2010			
	Lynwood High School East			
p 110052	World History B	F	5.00	0.00
p 201052	English 10 SEI B	F	5.00	0.00

Crs-ID	Course Title	Mark	Att/Cmp	
p 331052	Geometry SEI B	F	5.00	0.00
p 400042	Biology B	F	5.00	0.00
703000	Computer Scienc	C	5.00	5.00
742050	Support-ELA 10	D	5.00	5.00
743050	Support-Math 10	D-	5.00	5.00
* 900050	PE 10	A	5.00	5.00
	Credit Att: 40.00 Cmp: 20.00 TGPA: 1.00			
	Grade 10 Summer 2009-2010			
	Lynwood High School Summer School			
p 200041	English 9A	B	5.00	5.00
p 310041	Algebra I A	C	5.00	5.00
	Credit Att: 10.00 Cmp: 10.00 TGPA: 2.50			
	Grade 11 Fall 2010-2011			
	Lynwood High School East			
+ p 120161	US History H A	F	5.00	0.00
p 200061	English 11A	C-	5.00	5.00
p 310041	Algebra I A	C-	5.00	5.00
p 410051	Chemistry A	D	5.00	5.00
725000	CAHSEE-ELA	D	5.00	5.00
726000	CAHSEE-Math	D	5.00	5.00
	Credit Att: 30.00 Cmp: 25.00 TGPA: 1.17			
	Grade 11 Spring 2010-2011			
	Lynwood High School East			
+ p 120162	US History H B	F	5.00	0.00
p 200062	English 11B	A	5.00	5.00
p 310042	Algebra I B	F	5.00	0.00
p 410052	Chemistry B	D	5.00	5.00
725000	CAHSEE-ELA	D	5.00	5.00
726000	CAHSEE-Math	A	5.00	5.00
	Credit Att: 30.00 Cmp: 20.00 TGPA: 1.67			
	Grade 11 Summer 2010-2011			
	Lynwood High School Summer School			
p D40002	Chemistry B	F	5.00	0.00

Crs-ID	Course Title	Mark	Att/Cmp	
	Credit Att: 5.00 Cmp: 0.00 TGPA: 0.00			
	--WORK IN PROGRESS--			
	Lynwood High School East			
p A20061	US History A		5.00	0.00
p A30073	Government		5.00	0.00
p B00051	English 10 A		5.00	0.00
p B00071	English 12 A		5.00	0.00
p C20001	Algebra 2 A		5.00	0.00
p F42001	3D Art Hist 1A		5.00	0.00
	Total credit: 30.00			

Appendix C: State CST Performance 2010 Results

Lynwood High School

CST Algebra I

Result Type	4	5	6	7	8	9	10	11	EOC
Students Tested						610	174	91	875
% of Enrollment						89.6 %	22.4 %	16.0 %	
Students with Scores						599	169	90	858
Mean Scale Score						280.3	281.6	279.5	280.4
% Advanced						1 %	0 %	1 %	1 %
% Proficient						10 %	7 %	9 %	9 %
% Basic						14 %	21 %	18 %	16 %
% Below Basic						43 %	47 %	41 %	44 %
% Far Below Basic						32 %	24 %	31 %	30 %

CST Geometry

Result Type	4	5	6	7	8	9	10	11	EOC
Students Tested						40	505	157	702
% of Enrollment						5.9 %	64.9 %	27.6 %	
Students with Scores						40	501	151	692
Mean Scale Score						305.8	265.3	259.0	266.3
% Advanced						3 %	1 %	0 %	1 %
% Proficient						13 %	3 %	1 %	3 %
% Basic						35 %	14 %	9 %	14 %
% Below Basic						45 %	47 %	48 %	47 %
% Far Below Basic						5 %	37 %	42 %	36 %

CST Algebra II

Result Type	4	5	6	7	8	9	10	11	EOC
Students Tested						7	76	185	268
% of Enrollment						1.0 %	9.8 %	32.6 %	
Students with Scores						7	74	183	264
Mean Scale Score						*	295.1	266.2	276.1
% Advanced						*	4 %	0 %	2 %
% Proficient						*	9 %	3 %	5 %
% Basic						*	23 %	16 %	18 %
% Below Basic						*	39 %	37 %	37 %
% Far Below Basic						*	24 %	45 %	38 %

Notes: Grades 2 and 3 columns were deleted to fit page format.

Source www.cde.ca.gov/star2010....

Appendix C

State CST Performance 2011 Results – LUSD District

CST Algebra I

Result Type	2	3	4	5	6	7	8	9	10	11	EOC
Students Tested						1	943	713	164	59	1,880
% of Enrollment						0.1 %	78.6 %	63.3 %	13.7 %	4.8 %	
Students with Scores						1	943	713	164	59	1,880
Mean Scale Score						*	308.1	298.5	268.3	268.7	299.7
% Advanced						*	6 %	3 %	0 %	0 %	4 %
% Proficient						*	16 %	16 %	2 %	5 %	15 %
% Basic						*	23 %	20 %	15 %	7 %	21 %
% Below Basic						*	35 %	37 %	47 %	44 %	37 %
% Far Below Basic						*	20 %	23 %	35 %	44 %	23 %