

## **Low SES high school per pupil allocation and its effect on achievement**

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### **ABSTRACT**

The purpose of this study was to analyze the high school curriculum and instruction per pupil allocation and the effect on the Algebra I and English I State Assessment of Academic Readiness (STAAR) End of Course (EOC) scores. A mixed Analysis of Variance (ANOVA) was used to find if the high school curriculum and instruction per pupil allocation makes a difference on Algebra I and English I STAAR EOC scores.

The Accountability Rating Index report was used to select 40 secondary campuses based on 2014-2015 STAAR EOC scores. The mixed ANOVA considered Algebra I and English I STAAR EOC scores for the 2013–2014 school year, 2014–2015 school year, and 2015–2016 school year, and the per pupil allocation by high schools for curriculum and instruction budget. The results from this research study showed that there was not a significant difference among low, medium, and high levels of curriculum and instruction per pupil allocation over three years (2013-2014, 2014-2015, and 2015-2016) on Algebra I and English I STAAR EOC scores at low SES high schools in Texas. In addition, research results indicated that it appears that not enough money is provided to low SES high school campuses in the state of Texas to guarantee student success in Algebra I and English I STAAR EOC scores.

Pupil allocation, curriculum & instruction budget, SES, Algebra I STAAR, English I STAAR

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## INTRODUCTION

In 2007, the 80th Texas Legislature passed Senate Bill 1031 to eliminate the Texas Assessment of Knowledge and Skills (TAKS) for high school students and replace it with the State of Texas Assessment of Academic Readiness (STAAR) (Texas Classroom Teacher Association, 2011). The purpose of replacing the TAKS with the STAAR was to provide students with a more rigorous assessment that will prepare students for higher order thinking and college.

Denny (2014) stated that STAAR testing has not been providing the expected higher order thinking and college readiness, and scores show the lowest test scores in at least one of the end of course subjects. Fall 2014, STAAR scores showed that 85% of students who took the English I assessment failed the exam, and these numbers reflect the lowest passing scores since the STAAR assessment was first implemented (Denny, 2014).

Hegar (n.d.), explained that in 2012-2013 the state of Texas educated 5,058,939 students and spent over \$62 billion. Thirty-six percent of funding came from local taxes, 33% from state funding, 9% from federal funding, 17% from local bonds and sale of property, 3% from local funding and 2% from equity transfer. Although this may indicate that the state of Texas is funding public school adequately, Selby (2013) stated that the state of Texas currently ranks 49<sup>th</sup> in per pupil spending when compared to other states. This ranking has not changed or improved. Texas funding of public schools has remained stagnant and STAAR test scores have not improved in the past four years. Therefore, public schools must be creative with the funding allocated to curriculum and instruction to ensure that students are successful on the STAAR EOC.

### Statement of the Problem

A problem exists in Pre-K-12 education in regard to low English Language Arts and Mathematics STAAR EOC scores. The latest STAAR EOC scores indicated the lowest test scores in English I writing and Algebra I. Eighty-five percent of students who tested during the 2013 fall semester failed English I, and seventy percent failed Algebra I (Denny, 2014).

School districts continue to increase the budget allocated to curriculum and instruction in an attempt to find solutions to improve scores in English I and Algebra I STAAR EOC assessments. While district funding for curriculum and instruction continues to increase, school districts' STAAR EOC assessment scores continue to stagnate, and school districts fail to meet the standard for state accountability.

### Purpose

The purpose of this study was to determine if the high school curriculum and instruction per pupil allocation had an effect on Algebra I and English I STAAR EOC scores over three years at low Socio Economic Status (SES) high schools in Texas. Based on per pupil allocation, 40 secondary campuses with similar SES demographics were selected from the Texas Education Agency 2015 Accountability Ratings Index Data Overview Report to ascertain if the high school curriculum and instruction per pupil allocation had an impact on Algebra I and English I STAAR EOC scores.

## Review of the Literature

School districts have been facing additional challenges in recent years. Some of these challenges are public education funding cuts, and the implementation of the STAAR EOC. School districts are expected to do more with less because the STAAR exam is a more rigorous assessment, and public education budgets have been cut in recent years. Consequently, STAAR assessment results indicate that students are struggling with mathematics and English. According to a Texas Education Agency (TEA) summary report, 48% of ninth grade students passed the English I writing assessment and 52% of 10th graders passed the English II writing assessment (Bryan, 2013). In addition, the struggle with STAAR is not only in English. Denny (2014), explained that in a Texas Education Agency (TEA) summary report for December 2013, Algebra I STAAR EOC scores indicated that only 30% of the students who took the exam passed. Therefore, school districts have a problem with low STAAR scores in Algebra I and English I.

## STAAR Testing

In 2007, the 80th Legislature introduced the State of Texas Assessment of Academic Readiness (STAAR), which was based on a more rigorous curriculum aligned to high school coursework (Henricksen, 2013). The STAAR assessments are based on the Texas Essential Knowledge and Skills, which is the state curriculum for all school districts in the state of Texas (TEA, 2014). The STAAR assessment consists of exams in grades 3- 8 and end of course (EOC) assessments for high school students (TBLC, 2012). The STAAR assessment was first implemented during the 2011-2012 school year, and students were supposed to take and pass 12 EOC exams to graduate from high school. According to Senate Bill 1031, the 12 EOC assessments consisted of English I, English II, English III, algebra I, geometry, algebra II, biology, chemistry, physics, world geography, world history, and U.S. history (TCTA, 2011).

## STAAR Results

When the STAAR assessment was first implemented in the 2011-2012 school year, the expectation from state legislatures and from test makers was that STAAR scores would improve every two years. The STAAR EOC raw score table for the spring of 2012 from Lead4ward has phase 1 minimum scores, phase 1 level II satisfactory, phase 2 level II satisfactory, final level II satisfactory and level III phase in scale scores (Lead4ward, 2012). School districts use the STAAR EOC raw score conversion as guidance during the year when students take benchmarks.

Keller (2014) stated that students taking the math and reading assessments only need to answer 54% of the questions correctly to pass. Weiss (2015) explained that although the state kept a lower passing standard for four years, the percentage of students meeting the standard on any exam did not have a significant improvement since 2012; the first year the STAAR assessment was administered. For different reasons, the STAAR scale scores have remained stagnant. The STAAR standards are more rigorous than the TAKS standards and the necessary level of critical thinking, application skills, and in-depth knowledge is higher on the STAAR EOC assessments (TASB 2012). In addition, scale scores are not progressing as planned due to low STAAR scores. Students are struggling with STAAR EOC assessment scores in the subjects of Algebra I and English I.

Bryan (2013) explained that according to the TEA summary report, across the state, 48% of freshman students passed the English I assessment. These scores are low and indicate that the STAAR EOC is a rigorous assessment.

### **Public School Funding in U. S. Schools**

According to Goodwin (2011) in the past 40 years the U. S. has doubled Pre-K-12 public school spending, which means that the U. S. spends more money in K-12 public education than any other country in the world. Goodwin also explained that spending more money in Pre-K-12 public education has not produced the results expected in student achievement; in international measures U.S. student's achievement has not improved while student achievement from other countries has improved. Therefore, spending more money in K-12 public education is not the solution to close the achievement gap. School districts need to be implicit in the allocation and distributions of educational resources, and not only make the appropriate cuts, but make the right expenditures (Fege, 2004). In addition, Fege explains that students need to have quality teachers and principals, new facilities, and the newest technology resources. However, many school districts do not have the resources or the funding from the federal or state government to provide all the necessary resources to ensure student success.

### **School Finance System**

A major factor that is driving funding in the United States is accountability. The No Child Left Behind Act (2001) set higher expectations for student achievement, and it has changed the idea from basic instructional resources to resources that will make an impact in student achievement. The No Child Left Behind Act places greater accountability on school districts by holding them accountable for student subgroups such as English language learners (ELLs) and economically disadvantaged students (Pascopella, 2004). Recently, President Barack Obama signed into law the Every Student Succeeds Act (ESSA), which replaced NCLB. The ESSA kept the expectation that low performing schools will be accountable when student achievement and graduation rates are not improving over a period of time. Accountability expectations by ESSA make school districts spend additional funding to provide supplemental, enrichment, and lower student to teacher ratios, in their school districts. To provide students with supplemental resources, school districts need additional funding. School districts in the United States are funded in three different ways: (1) the state, (2) property taxes, and (3) the federal government (Niven, Holt, & Thompson, 2014).

### **Per Pupil Funding**

According to the Education Journal (2012), school districts do not separate per pupil funding from the main budget, and they use per pupil funding to pay teacher and administrator's salaries. Consequently, school districts end up with limited resources to provide a quality rich curriculum, supplemental resources, and enrichment activities to students. The Education Journal (2012) recommends that school leaders evaluate how to more effectively spend per pupil funding to make sure that it is not spent on activities that do not have a significant impact on student achievement. Since school districts receive limited budgets, it is important that school leaders

collaborate with school finance personnel to ensure that funding is spent on curriculum resources that will make a difference on student achievement.

### **Student Achievement and School Funding**

Student achievement in the U.S. could be related to inequity in regard to school funding, although some states such as Texas make an effort to equally fund school districts, not all districts receive the same per pupil funding. Goodwin (2011) stated that one of the reasons for having a difference in per pupil funding is because school districts allocate funding using systems that distribute teachers rather than distributing funding. He explained that experienced teachers move to schools that have lower numbers of at-risk students or low socioeconomic status. Therefore, some schools have teachers' salaries that average \$57,000 while other schools have teacher salaries that average \$37,000. This practice leaves inexperienced teachers in schools that have students with the most needs. Therefore, the achievement of at-risk students or low socioeconomic status students is affected by having lack of resources and inexperienced teachers. During the budget process, school districts may consider to provide competitive salaries to retain experience teachers in school with high numbers of economically disadvantaged students.

### **Budget cuts**

To ensure that all students in the state of Texas receive a quality education, a fair and equitable funding system is necessary for school improvement to succeed (Villanueva, 2013). According to the Parent's Guide to the Impact of Public Education Budget Cuts, in 2011 the Texas's Legislator made huge cuts to public education budgets. The historical cuts totaled \$5.4 billion. Barta (2011) explained that \$4 billion was cut from public school funding and \$1 billion from higher education, which included financial aid to about 41,000 students, and eliminated 5,700 jobs from state agencies. In addition, Barta stated that district funding was cut by 3.3% during the first year. Budget cuts to school districts were implemented in other states as well.

Less funding for students has also had an impact on at-risk students who need an increased amount of individual attention. Since individual attention is not available to at-risk students due to larger class sizes, at-risk students are falling more and more behind the researcher explained. Furthermore, Barta stated that per pupil expenditures has declined from 2009 to 2014, and the base state aide per pupil in 2014 was \$3,838. Due to not receiving sufficient funding from the state, public schools depended on their reserves and raised local taxes to supplement state funding. Some of the immediate effects in Texas are similar to those of other states that have experience budget cuts in recent years. Some of the effects were increased class sizes, deferred upgrades in technology and maintenance, and cutting the prekindergarten funding as stated in the Parent's Guide to the Education of Public Education Budget Cuts. In addition, curriculum and instruction has been compromised by increasing the number of students in every classroom, and districts have not been able to retain and hire good teachers due to being unable to offer competitive salaries. Furthermore, some school districts are forced to use fund balances in order to provide better salaries to teachers, which is not recommended because it may affect the cost of future bonds.



## Methodology

Forty rural secondary campuses selected from the Texas Education Agency 2015 accountability ratings index data overview report included high school campuses that assign different amounts of their campus budget to the curriculum and instruction per student allocation. The 40 secondary campuses selected were compared among each other to determine if the high schools' per student allocation to curriculum and instruction impacts STAAR EOC scores on the subjects of Algebra I and English I.

## Population and Sample

The public secondary campuses utilized for this study are located in regions across the state of Texas. According to the accountability rating index report, these secondary campuses have similar economically disadvantaged demographics and similar size. The secondary campuses selected for this study have economically disadvantaged percentages similar to one another.

The participants for this sample included students in grade level 9 only. Students take the STAAR EOC exams for Algebra I and English I in grade 9. The STAAR EOC scores utilized for this study included test scores for ninth grade students, and the campuses selected for this study were secondary campuses with high numbers of low SES.

The English I and Algebra I STAAR EOC scores used for this study included students who took the STAAR EOC during the spring semester. The 2013-2014, 2014-2015, and 2015-2016 TAPR reports provided the scores for this study.

The 2013- 2014 district financial data was retrieved from the 2015 TAPR report. The financial data provided in the 2015 TAPR report was from the previous year since school districts end the school budget year in either June or August (TEA, 2010). According to the Financial Accountability System Resource Guide (FASRG), function 11 (curriculum and instruction) is the budget utilized by school districts for activities directly between teachers and students. Teachers may provide instruction in the classroom, at home, or in any other setting provided through technology. In addition, the FASRG explains that function 11 includes salaries for classroom teachers, teacher assistants, teacher aides, and any other staff working in the classroom providing direct instruction or support to students.

Each of the 40 school districts selected for this study have high schools with similar economically disadvantaged demographics. Although the high school campuses have similar economically disadvantaged demographics, each school district allocates different amounts of funding to their curriculum and instruction (C & I) campus budget and each high school spend different amounts of money per individual student. The curriculum and instruction per pupil allocation for the 40 high school campuses ranges from \$3,767 to \$7,541. The 40 high school campuses will be divided into three groups based on the curriculum and instruction per pupil allocation; the low level group, medium level group, and high level group.

## Instrumentation

The current study measured the impact that the district and high school curriculum and instruction budget had on Algebra I and English I STAAR EOC scores. The measures used for this study included the STAAR EOC exam that is required by all high school students in Texas,

and the Texas Academic Performance Report (TAPR) financial report that provides a summary of the budget allocated to curriculum and instruction, campus budget financial data for the curriculum and instruction budget allocated per student. The TAPR financial report included the budget allocated by school districts to each function. The budget allocated to curriculum and instruction was the same as the budget allocated to function 11. In addition, STAAR assessment scores for Algebra I and English I were retrieved from the 2013-2014, 2014-2015, 2015-2016 TAPR reports.

## Data Analysis

A mixed Analysis of Variance (ANOVA) was analyzed for the relationship of the independent variable curriculum and instruction per pupil allocation and time (2013-2014, 2014-2015, 2015-2016) on the dependent variable STAAR scores for Algebra I and English I. Secondary campuses with similar economically disadvantaged demographics were selected from the 2015 accountability ratings index data overview report to determine if there was a relationship between the curriculum and instruction per pupil allocation and Algebra I and English I STAAR EOC scores.

## ANALYSIS OF DATA

### Descriptive Statistics

The descriptive statistics are provided in Table 1. The following descriptive statistics are provided for three types of per pupil allocation groups: low group, medium group, and high group. There were 40 schools categorized into three different groups based on the per pupil allocation: The low group per pupil allocation consisted of 13 schools whose per pupil allocation ranged from \$3,767 to \$4,656. The medium group consisted of 14 high schools whose per pupil allocation ranged from \$4,704 to \$4,959. Finally, the high group consisted of 13 schools whose per pupil allocation range consisted of \$5,008 to \$7,541.  
“as indicated in Table 1 (Appendix)”

Table 2 Descriptive Statistics of per pupil allocation and Algebra I STAAR EOC Scores for 3 Years. The descriptive statistics in this table show the per pupil allocation for group 1, group 2, and group 3, and the 2013-2014, 2014-2015, and 2015-2016 Algebra I EOC scores for each of the high school campuses in each group.

“as indicated in Table 2 (Appendix)”

Table 3 Descriptive Statistics of per pupil allocation and English I STAAR EOC Scores for 3 Years. The descriptive statistics in this table show the per pupil allocation for group 1, group 2, and group 3, and the 2013-2014, 2014-2015, and 2015-2016 English I EOC scores for each of the high school campuses in each group.

“as indicated in Table 3 (Appendix)”

### Inferential Statistics

A mixed analysis of variance (ANOVA) was conducted to evaluate if there is a significant difference among low, medium, and high levels of curriculum and instruction per pupil allocation over three years (2013-2014, 2014-2015, and 2015-2016) on Algebra I STAAR

EOC scores at low SES high schools in Texas. The results of the mixed ANOVA indicated that there was a statistically significant main effect of time,  $F(2, 74) = 14.23$ ,  $p < .001$ , partial  $\eta^2 = .278$ , but not for per pupil allocation,  $F(2,37) = .401$ ,  $p = .67$ , partial  $\eta^2 = .021$ . In addition, the time main effect was qualified by having no statistically significant interaction between time and per pupil allocation  $F(4,74) = 1.36$ ,  $p = .254$ , partial  $\eta^2 = .069$ . Table 4 provides the means and standard deviations for time (school year, 13-14, 14-15, and 15-16) and per pupil allocations. "as indicated in Table 4 (Appendix)"

The data in Table 4 and 6 were used to determine if there was a significant difference between the Algebra I per pupil allocation groups. A first paired samples t-test indicated that there was not a significant difference between the 13-14 Algebra I scores ( $M=70.30$ ,  $SD=10.58$ ) and the 14-15 Algebra I scores ( $M=69.85$ ,  $SD=10.36$ )  $p=1.00$ . The 14-15 Algebra I scores ( $M=69.85$ ,  $SD=10.36$ ) were significantly higher than the 15-16 Algebra I scores ( $M=62.98$ ,  $SD=10.18$ )  $p=.00$  and the 13-14 Algebra I scores ( $M=70.30$ ,  $SD=10.58$ ) were significantly higher than the 15-16 Algebra I scores ( $M=62.98$ ,  $SD=10.19$ )  $p= .00$ . According to pairwise comparisons, 13-14 Algebra I STAAR EOC scores were not significantly different from the 14-15 Algebra I STAAR EOC scores at low SES high schools in Texas.

A mixed analysis of variance (ANOVA) was conducted to if there is a significant difference among low, medium, and high levels of curriculum and instruction per pupil allocation over three years (2013-2014, 2014-2015, and 2015-2016) on English I STAAR EOC scores at low SES high schools in Texas. The assumption of sphericity was violated. Greenhouse-Geisser epsilon was used to correct degrees of freedom. Results indicated a statistically significant main effect of time,  $F(1.73, 64.07) = 20.24$ ,  $p < .001$ , partial  $\eta^2 = .354$ , but not per pupil allocation,  $F(2, 37) = .092$ ,  $p = .91$ , partial  $\eta^2 = .005$ . In addition, the time main effect was qualified by having no statistically significant interaction between time and per pupil allocation,  $F(3.46, 64.07) = .92$ ,  $p=.445$ , partial  $\eta^2 = .048$ . Table 5 provides the means and standard deviations for time (school years 13-14, 14-15, and 15-16) and per pupil allocations. "as indicated in Table 5 (Appendix)"

The data in Table 5 and 7 were used to determine if there was a significant difference between the English I per pupil allocation groups. Pairwise comparisons were significant for English I EOC scores,  $p < .01$ . A first paired samples t-test indicated that the 13-14 English I scores ( $M=60.70$ ,  $SD=7.14$ ) were significantly lower than the 14-15 English I scores ( $M=63.72$ ,  $SD=8.31$ )  $p = .002$ . The 14-15 English I scores ( $M=63.72$ ,  $SD=8.31$ ) were significantly higher than the 15-16 English I scores ( $M=57.02$ ,  $SD=7.01$ )  $p=.006$  and the 13-14 English I scores ( $M=60.70$ ,  $SD=7.14$ ) were also significantly higher than the 15-16 English I scores ( $M=57.02$ ,  $SD=7.01$ ). According to pairwise comparisons, 14-15 English I STAAR EOC scores were significantly higher than 13-14 and 15-16 English I STAAR EOC scores at low SES high schools in Texas.

"as indicated in Table 6 (Appendix)"

"as indicated in Table 7 (Appendix)"

## CONCLUSIONS

According to the descriptive statistics in this research study, in some cases, school districts with high numbers of low SES students that allocated the lowest per pupil allocation achieved higher scores in Algebra I or English I STAAR EOC scores, and sometimes, these

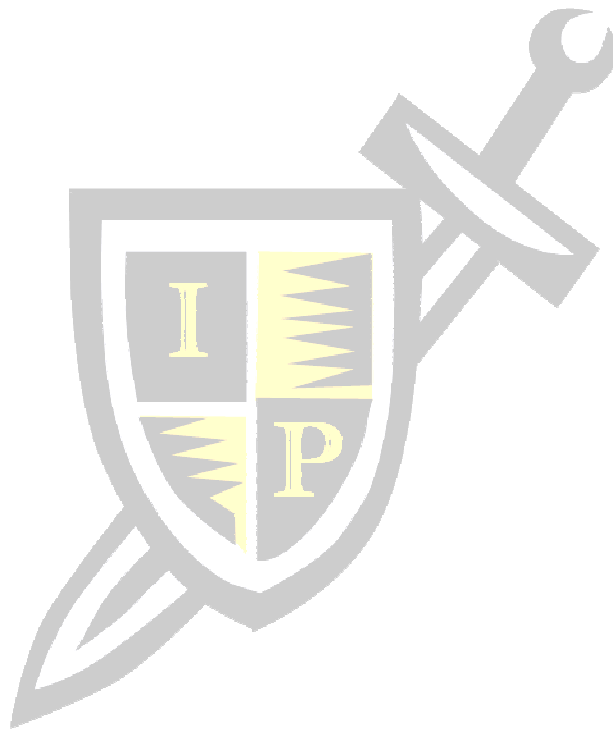


school districts that allocated at the medium level of per pupil allocation achieved higher scores in either Algebra I or English I STAAR EOC scores. Therefore, districts that allocated additional funding to curriculum and instruction for high school campuses with low SES in the state of Texas did not achieve higher STAAR EOC scores in English I and Algebra I. In addition, research results indicated that it appears that not enough money is provided to low SES high school campuses in the state of Texas to guarantee student success in Algebra I and English I EOC scores. Other factors that could be affecting student achievement are campus leadership, years of teaching experience, and instructional practices.

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**APPENDIX**

Table 1

*Descriptive Statistics for Levels of Per Pupil Allocation (N=40).*

Levels of Per Pupil Allocation	N	Range
Low	13	\$3,767-\$4,656
Medium	14	\$4,704-\$4,959
High	13	\$5,008-\$7,541

Table 2

*Descriptive Statistics for Per Pupil Allocation and Algebra I STAAR Scores*

Campus	Per Pupil Allocation	13 -14	14 – 15	15 – 16
Group 1				
High School 1	3,767	74	68	57
High School 2	3,996	67	68	56
High School 3	4,195	44	51	59
High School 4	4,278	75	56	60
High School 5	4,293	66	62	55
High School 6	4,353	66	58	44
High School 7	4,440	78	84	78
High School 8	4,465	84	72	70
High School 9	4,502	73	76	66
High School 10	4,578	55	82	77
High School 11	4,590	76	76	66
High School 12	4,613	59	71	70
High School 13	4,656	66	67	60
Group 2				
High School 14	4,704	83	81	54
High School 15	4,706	80	84	55
High School 16	4,726	45	56	35
High School 17	4,730	72	62	72
High School 18	4,735	53	50	49
High School 19	4,742	70	56	62
High School 20	4,787	79	83	60
High School 21	4,793	64	70	52
High School 22	4,794	77	71	73
High School 23	4,807	66	57	45
High School 24	4,813	76	74	65
High School 25	4,856	75	85	73
High School 26	4,909	84	74	70
High School 27	4,959	82	77	73
Group 3				
High School 28	5,008	60	75	71
High School 29	5,016	63	65	62

High School 30	5,140	83	78	70
High School 31	5,157	67	70	50
High School 32	5,193	64	53	60
High School 33	5,215	53	54	64
High School 34	5,250	77	72	56
High School 35	5,462	84	88	75
High School 36	5,574	71	69	70
High School 37	5,586	77	80	77
High School 38	5,624	73	67	77
High School 39	5,649	71	77	68
High School 40	7,541	80	75	63

Table 3

*Descriptive Statistics for Per Pupil Allocation and English I STAAR Scores*

Campus	Per Pupil Allocation	13-14	14-15	15-16
Group 1				
High School 1	3,767	64	67	62
High School 2	3,996	55	67	56
High School 3	4,195	49	56	55
High School 4	4,278	60	54	50
High School 5	4,293	53	58	51
High School 6	4,353	52	49	45
High School 7	4,440	65	77	65
High School 8	4,465	71	72	64
High School 9	4,502	71	64	64
High School 10	4,578	66	71	63
High School 11	4,590	66	64	65
High School 12	4,613	53	53	50
High School 13	4,656	53	61	60
Group 2				
High School 14	4,704	72	77	50
High School 15	4,706	58	63	53
High School 16	4,726	55	48	53
High School 17	4,730	59	68	68
High School 18	4,735	41	46	50
High School 19	4,742	55	54	60
High School 20	4,787	66	71	54
High School 21	4,793	56	64	56
High School 22	4,794	69	75	64
High School 23	4,807	55	49	51
High School 24	4,813	64	70	60
High School 25	4,856	65	65	67
High School 26	4,909	69	64	61
High School 27	4,956	64	70	55
Group 3				

High School 28	5,008	57	65	48
High School 29	5,016	68	64	63
High School 30	5,140	63	71	65
High School 31	5,157	58	63	40
High School 32	5,193	59	63	58
High School 33	5,215	48	51	50
High School 34	5,250	65	75	59
High School 35	5,462	67	74	64
High School 36	5,574	60	61	42
High School 37	5,586	59	65	63
High School 38	5,624	67	66	60
High School 39	5,649	69	71	57
High School 40	7,541	62	63	60

Table 4  
*Per Pupil Allocation (PPA), Mean (M) and Standard Deviation for Algebra I*

Time	PPA	Mean	Standard Deviation
Algebra I 13-14	1	67.92	10.68
	2	71.86	11.51
	3	71.00	9.82
	Total	70.30	10.58
Algebra I 14-15	1	68.54	9.88
	2	70.00	11.83
	3	71.00	9.82
	Total	69.85	10.36
Algebra I 15-16	1	62.92	9.49
	2	59.86	12.01
	3	66.38	8.18
	Total	62.98	10.19

Table 5  
*Per Pupil Allocation (PPA), Mean (M) and Standard Deviation for English I*

Variable	PPA	Mean	Standard Deviation
English I 13-14	1	59.85	7.70
	2	60.57	8.09
	3	61.69	5.79
	Total	60.70	7.14
English I 14-15	1	62.54	8.30
	2	63.14	10.09
	3	65.54	6.29
	Total	63.72	8.31
English I 15-16	1	57.69	6.91
	2	57.29	6.09
	3	56.08	8.37



Total	57.02	7.01
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Table 6

*Pairwise Comparisons for levels of Per Pupil Allocation and Algebra I*

Variable	p
Low level vs medium level	1.00
Low level vs high level	.000
Medium level vs high level	.000

Notes.  $p < .05$

Table 7

*Pairwise Comparisons for levels of Per Pupil Allocation and English I*

Variable	p
Low level vs medium level	.002
Low level vs high level	.006
Medium level vs high level	.000

Notes.  $p < .05$

