Elev8-YDI in Albuquerque Public Schools (2011-12)

Prepared for YDI, Inc., New Mexico, by the UNM Center for Education Policy Research

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EXECUTIVE SUMMARY

Elev8 is a full-service community school initiative, undertaken by Youth Development, Inc. (YDI), in five middle schools in diverse rural and urban New Mexico communities. Funded by the Atlantic Philanthropies, Inc., the Elev8-New Mexico initiative aims to support disadvantaged students and communities, reduce achievement gap, prepare students for high school, and keep students on-track to graduation. The Elev8 initiative is based on four essential tenets: extended learning, school-based health centers (SBHC), family and community engagement, and integration of resources and services across the three categories above. The Center for Education Policy Research (CEPR) at the University of New Mexico (UNM) is the evaluator of the Elev8-New Mexico initiative, and while CEPR is planning a multi-year cohort study to evaluate the Elev8- New Mexico initiative, this report maintains a narrow focus and examines the student information from the 2011-12 school year for two Elev8 middle schools in Albuquerque public Schools (APS).

YDI implemented the Elev8 initiative in a comprehensive manner in the two APS schools, providing a wide range of services through the school-based health centers, extended learning programs, and family and community supports. The results reported here for the 2011-12 school year indicated certain patterns, such as that poverty and minority status had negative impact on achievement and that gender was a factor in academic success. School absences had negative impact on school performance. While simple statistical techniques suggested that students participating in the extended learning programs, in most demographic subgroups, tended to have marginally better course grades and performed slightly better on standardized tests, more in-depth statistical analyses showed no program impact on student success. It must be noted that individual level data for healthcare participation or family supports were not available and evaluators had to work with incomplete data and imperfect comparison groups. Limitation of the data made it difficult to gauge program impact.

CEPR evaluators will undertake a three-year longitudinal cohort study to measure Elev8's impact on the students in the middle grades in improving their high school preparedness and keeping them on-track to graduation. The future evaluation with a strong research design based on longitudinal data will help program improvement and have policy implications for educators and policy makers at local and national levels. CEPR evaluators recommend more meticulous program participation information covering all areas of services be maintained and made available to the CEPR evaluators for the future evaluation of the Elev8 initiative.

INTRODUCTION

Elev8 is a full-service community school initiative, undertaken by Youth Development, Inc. (YDI), in five middle schools in diverse rural and urban New Mexico communities. The primary mission of the Elev8 Initiative is to reduce achievement gap, improve student outcomes in schools, and keep students on track for high school graduation. Elev8 strives to provide primary and behavioral healthcare and extended learning programs to support the students from resource-poor communities. Elev8 focuses on family and community engagement in schools by offering the families educational services and other assistance to mitigate life's challenges, and by empowering families to actively engage in schools and their student's education.

The Center for Education Policy Research (CEPR) is the evaluator of the Elev8-New Mexico initiative, and while CEPR is planning a multi-year cohort study that includes comparison groups from non-Elev8 schools to evaluate the Elev8 Initiative, this report maintains a narrow focus and examines the student information from the 2011-12 school year for two Elev8 middle schools in Albuquerque Public Schools (APS).

BACKGROUND

Despite many years of well-meaning policies at the federal, state, and local levels, the achievement gap between the disadvantaged low-income and minority students and their upper-income non-minority counterparts has remained stubbornly persistent over the past decades. Researchers, practitioners, and policy makers alike strive to identify factors that are associated with student achievement in high-poverty and predominantly-minority schools and communities. Recent theories and research point to the merits of addressing students' needs in middle schools to improve their attachment to school and prepare them to cope with the social and academic challenges in high school. Programs that provide support to students and families with school-based health centers, afterschool enrichment programs for students, and workshops and other educational opportunities for families, improve the students' odds of success in high school, and keep students on-track to high school graduation. Although research suggests that targeted and well-implemented school programs are associated with positive outcomes for students, there is limited research looking at the persistence of positive outcomes over time as students move from middle to high school.

Johns Hopkins professor Bob Balfanz's work focuses on early warning indicators - developed using information on attendance, behavior, and course performance - in middle grades that are designed to alert educators of looming high school drop-outs and a

need for intervention.[1] Elaine M. Allensworth's research at the Consortium of Chicago School Research at the University of Chicago has focused on early warning measures in the 9th grade for keeping students on-track for graduation.[2]

Taking inspiration from studies on early warning indicators and their impact on predicting and preventing high-school dropouts, the present report examines student information from 2011-12 school year to describe and compare the demographic characteristics and achievement of Elev8 students and their counterparts in ELev8 schools. These data and findings can provide the baseline for future studies that track students into high school grades.

ELEV8 IN NEW MEXICO

Elev8 has been implemented in New Mexico schools since 2007. Funded by the Atlantic Philanthropies, initially through New Mexico Community Foundation, this initiative has been implemented by YDI in five middle schools located in diverse communities across New Mexico. Gadsden Middle School, a part of the Gadsden Independent School District, is located in Anthony, a rural community in Southeastern part of the State. Grant and Wilson are situated in an urban district, Albuquerque Public Schools. Laguna Middle School is under Laguna Department of Education in Laguna Pueblo, while Native American Community Academy (NACA) is a public charter school in Albuquerque.

Elev8 Model - Goals and Strategies

Key goals of the Elev8 initiative are to support and strengthen low-income communities and families to boost their students' education by alleviating the impact of disadvantages in their lives. Elev8 focuses on the middle grades to prepare students for success in high school and improve their chances of graduation. In order to achieve these goals, Elev8 model follows four essential principles:

- Extended learning in before- and after-school programs
- School-based health centers (SBHC) to meet health needs
- Family and community engagement, and
- Integration of resources and services across the three categories above

[1] See a list of publications and presentations on the website Everyone Graduates: http://new.every1graduates.org/improving-student-attendance-with-a-school-wide-approach-to-school-family-community-partnerships/

[2] An example of Allensworth's work: What Matters for Staying On-Track and Graduating in Chicago Public High Schools, by Elaine M. Allensworth and John Q. Easton (2009).

Elev8 schools offer a wide range of cultural and academic afterschool learning opportunities, including exposure to technology and 21st Century skill development. Family resource centers provide family and community support services, while the SBHCs importantly attempt to meet the students' primary and behavioral health needs. A variety of service providers works with shared goals and integrated efforts to enhance effectiveness in serving the student as a whole person.

Elev8 in Grant and Wilson Middle Schools

This report presents information from 2011-12 on two Elev8 middle schools in APS – Grant and Wilson. Both Grant and Wilson are Title I schools, with 62.5% and 85.5% of the students, respectively, qualifying for free or reduced-price lunch in 2011-12. The schools housed fully functional school-based health centers (SBHC) that provided healthcare support. Elev8-operated Family Resource Centers coordinated a wide range of extended learning programs and family support services. The information on the implementation of key Elev8 tenets is presented below.

SBHC provided:

1. Physical health: A wide range of physical healthcare extended from immunizations and well-child check-ups to acute and chronic conditions to lab work and health education
2. Mental health: a variety of group, family, and individual counseling and psychiatric care services
3. Dental services

Extended learning activities, provided before- and after-school, and sometimes in the evening and weekends, included:

1. Academic areas
2. Cultural domain
3. Learning behavior such as leadership development, service learning, and positive decision making
4. Teen outreach
5. Physical activity

Family supports and engagement comprised of myriad activities; for example:

1. Family Resource Center
2. Academic socialization and workforce development
3. Public benefit outreach
4. Emergency assistance

(See Appendices B-G for details.)

Students Receiving Elev8 Services

Elev8 schools provided a variety of services, and students and families participated in multiple ways. For instance, students in extended learning also went to SBHCs and their families sought services in the Family Resource Center. While individual participation data were available for extended learning, healthcare data were available only in aggregate numbers due to HIPPA regulations. Moreover, family supports data were not available to connect to individual students. As Table 1 shows, documented student participation showed magnitude of the Elev8 activity, but there was no way of knowing of the overlap between student numbers across healthcare and extended learning. Similarly, the non-participating group (see Table 3) included students who received healthcare at the SBHC and were incorporated in the aggregate SBHC data. As the Limitations Section (p.5) indicates, a large proportion of students in these Elev8 schools were being served by Elev8 supports of one or more kind; there simply was no individual level data accessible to the evaluators due to HIPPA and other concerns. As a result, no Elev8 versus non-Elev8 student comparisons were truly possible since the groups were not exclusively Elev8 or non-Elev8.

Table 1

	SBHC-Aggregate Data		Extended Learning	
2011-12	Total Visits (Incl Behv)	Behavioral only	Individual Level Data	Family Supports
Grant	1047	376	131	?
□	□	□	□	□
Wilson	382	154	45	?

OBJECTIVES AND METHODS

The purpose of this report is to:

1. Describe the demographic and other characteristics of the students participating in the extended learning programs and contrast them with the non-participating students

2. Examine any systematic difference in the academic outcomes of Elev8 students participating in the extended learning and their non-participating peers in the same school

3. Explore if there is a difference in the student characteristics, program participation rate, or outcomes across the two schools

CEPR acquired access to the APS data pertaining to Grant and Wilson Middle Schools through the Memorandum of Understanding (MOU) between YDI and APS where CEPR is listed as an evaluator and a recipient of the data. Analysis of the data included the use of Excel pivot tables and charts to examine the relationship between demographic variables, program participation, and student achievement, measured with course grades and scores on the New Mexico Standards Based Assessment (SBA). Linear Regression models were used to examine the impact of program participation when the effects of demographic characteristics and other explanatory variables are removed. Regression is also used to explore absences – who is likely to miss school and by how much – a variable deemed important as part of the early warning indicators.

Limitations

The Elev8 data for the school year 2011-12, which formed the basis of this study, included only the students in the extended learning programs and hence only partially represented the population supported by Elev8. The students seeking primary, dental, and behavioral health services were not included here due to HIPPA regulations. Also, there was no way to connect family support services to student data to measure indirect benefits the student may have received. In other words, Elev8 beneficiaries may be part of the pool of students who do not participate in the extended learning programs, or the comparison group. Therefore, since we do not have a comparison group of true non-Elev8 students, we are limited in drawing conclusions about program impact, or a seeming lack thereof.

Grant and Wilson Middle School (MS) Student Information

The extended learning (EL) program participation data were collected by YDI while overall school and student information was received from APS.

Both Grant and Wilson MSs are Title I schools that are located in low-income areas of town, and percentage of free or reduced-price meal eligible students was greater in Wilson (85.5%)

compared to Grant (62.5%). The schools differed on their ethnic make-up in that almost three fourths of the students in Wilson were Hispanic and only one in ten students were Caucasian. On the other hand, almost a third of Grant students were Caucasian and slightly over half were Hispanic. Clearly, the students at Wilson are poorer and more ethnically diverse as compared to Grant MS. These middle school data in this evaluation include all three grade levels, grades 6 through 8.

Table 2 School Demographics (2011-12)

	African-American	Asian/ Pacific	Caucasian	Hispanic	American Indian/ Alaskan Native	Native Hawaiian/ Pacific Islander	Free/ Reduced Price Meal Rate	Percent Special Education Students	Percent English Lang. Learners (ELL)
Grant	5.8%	3.6%	31.6%	55.6%	3.3%	.0%	62.5	18.5%	5.3%
Wilson	6.7%	1.5%	11.8%	73.3%	6.7%	.0%	85.5	19.8%	31.9%

In Grant MS, of the total 748[3] students, 131 (17.5%) participated in extended learning, whereas in Wilson MS 45 (6.6%) of the total 678 students participated in the extended learning programs.

Table 3 Students in the Extended Learning Programs in 2011-12

	Grant MS	**Wilson MS**	**Total**
Extended Learning (EL)	131	45	176
Non-EL	617	633	1,250
Total Students	748	678	1,426

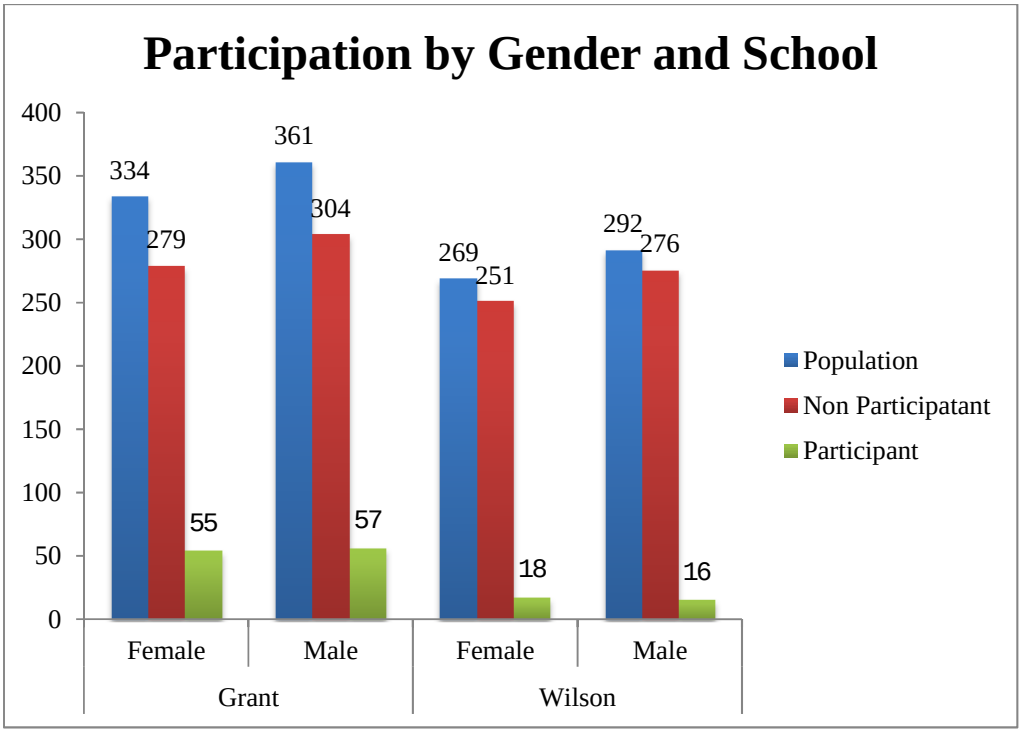
[3] There were 748 Grant students and 678 students in the APS data file. These numbers may differ from the APS' official enrollment numbers because we used cumulative data from the end-of-the year data pull for the school year 2011-12.

Table 4 Ethnicity of the students in Extended Learning Programs

	African-American	Asian	Caucasian	Hispanic	American Indian/ Alaskan Native	Total*
Grant	10	3	40	57	2	112
Wilson		2	4	24	4	34
Total	10	5	44	81	6	146

*APS was able to provide demographic data on 146 students out of 176 in exxtended learning.

Figure 1 Gender



FINDINGS

Student Achievement in Math and Language Arts Courses and on SBA

The most notable observation in the next Figure 2 on math course grade averages is that in both schools a smaller proportion of the students in extended learning programs received a failing grade than their non-participating peers. In Grant MS, a slightly greater proportion of participating students received A-C grades combined than their non-participating peers.

Figure 3 that follows compares Grant and Wilson's non-participating students first and participating students next, and tells a complex story. While the A-F grade distribution among the non-participating and participating students in Grant remained relatively stable, Wilson's participating students were clustered largely into Cs, Ds, and Fs. One explanation of this might be that the students participating in the program at Wilson were truly struggling students and tracking their progress through the next years may tell us a more meaningful story about the program's impact.

Figure 2

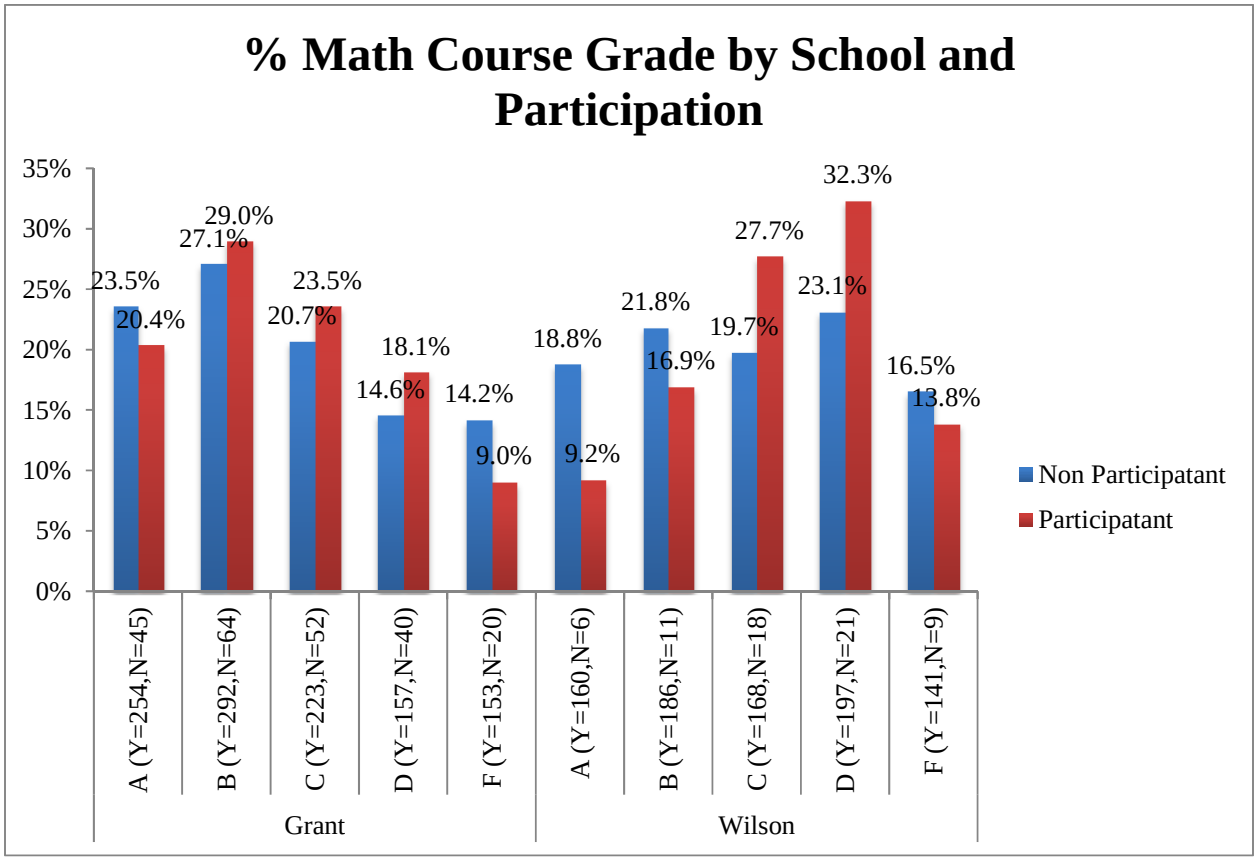
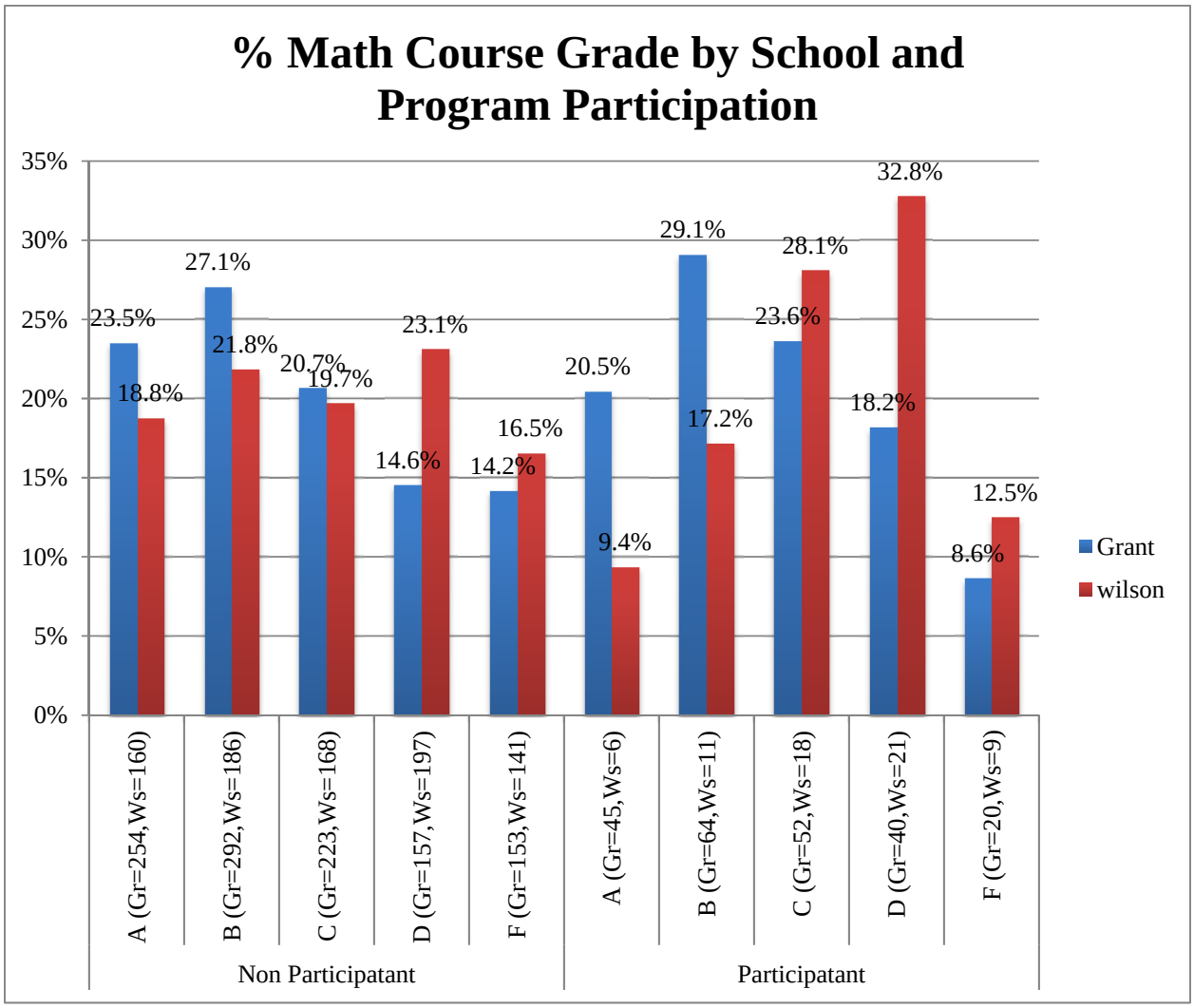
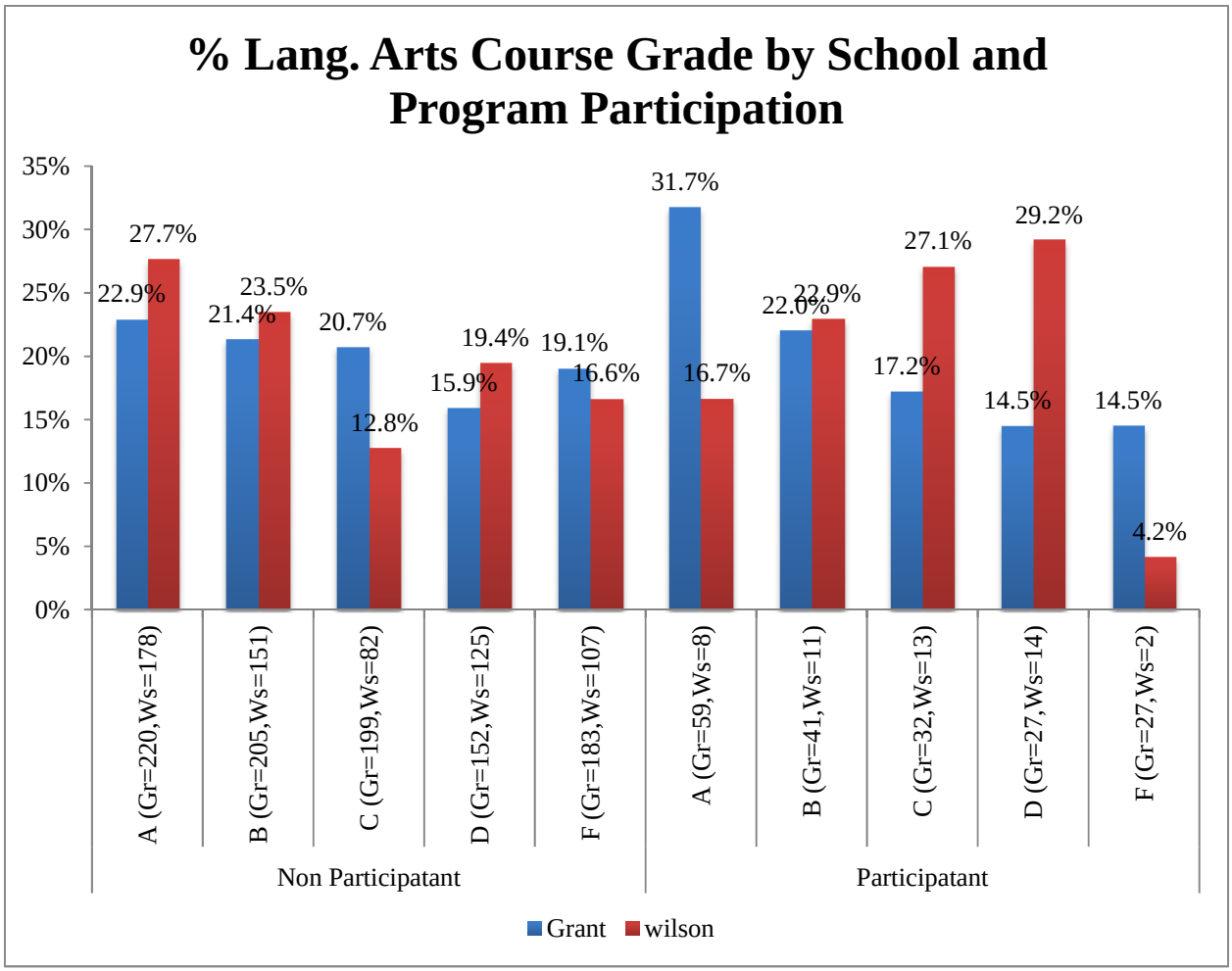


Figure 3



Next, Figure 4 compares the grade distribution for language arts course grades among participants and non-participants across the two schools. Among non-participants, the proportion of Wilson students making A's and B's was higher compared to the students in Grant. Among the extended learning participants, a greater proportion of Wilson students were in C and D categories. Interestingly, a smaller proportion is failing language arts classes in Wilson. These findings raise more questions than provide answers. Here, the results again suggest that Elev8 students at Wilson might be in serious need of support.

Figure 4



The following Figures 5 and 6 explore the differences in achievement by ethnicity and program participation. Figure 5 presents math grade point averages of participants and non-participants within ethnic groups. The number of cases is very small among the participants. However, one clear pattern noted is that, in Grant, extended learning participants of all but one ethnic group did better than their counterparts in the school. On the other hand, math grade average was very low for the Native American and Hispanic students in Wilson regardless of program participation. These results suggest that a larger need exists in the school for support and that the number of participants in extended learning needs to be boosted with efforts. Figure 6, representing the grade averages for language arts reiterate the previous finding that the participants do better than their counterparts in Grant. In Wilson, participating students from the Native American group seemed to have better grades in language arts than their non-participating peers.

Figure 5

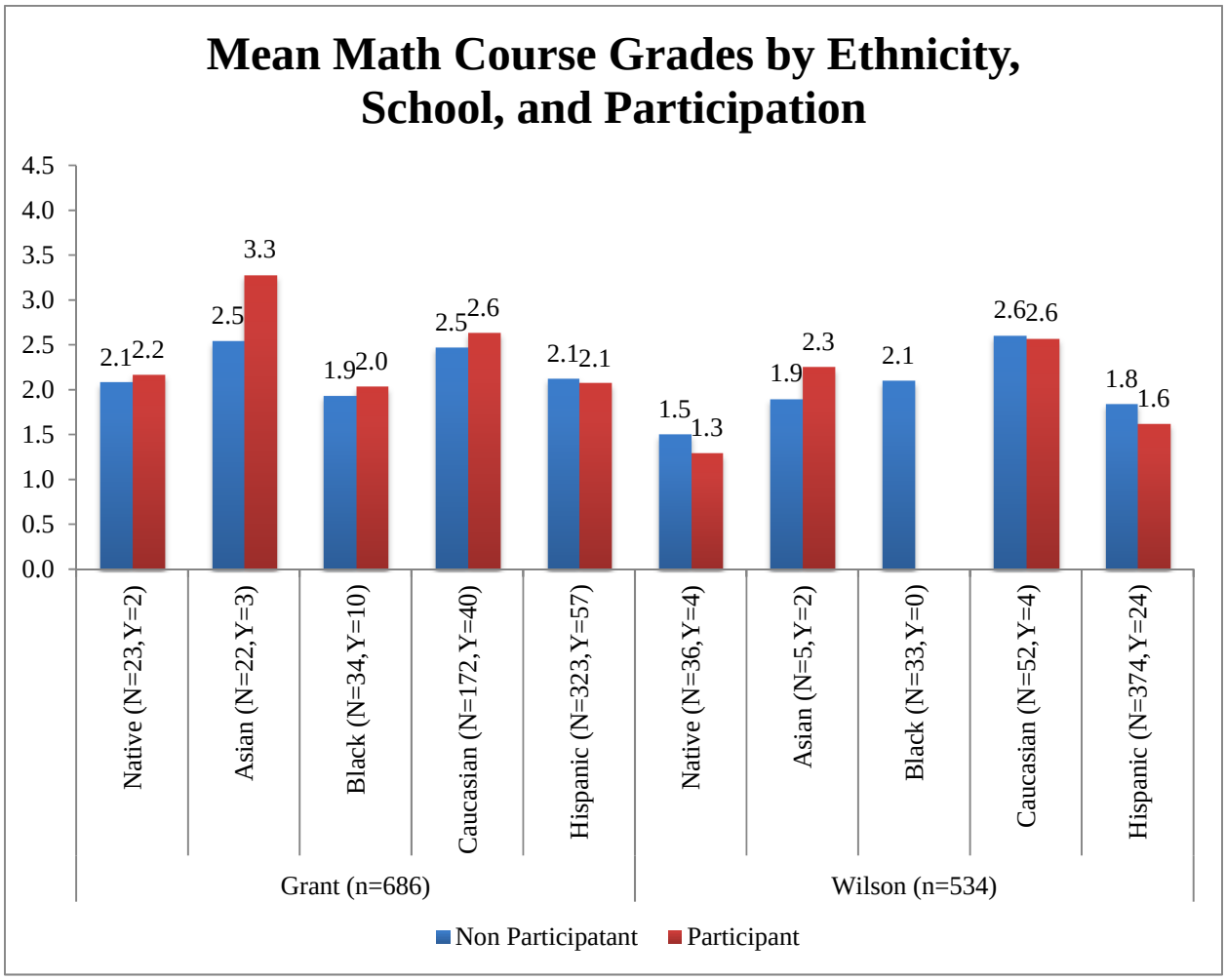
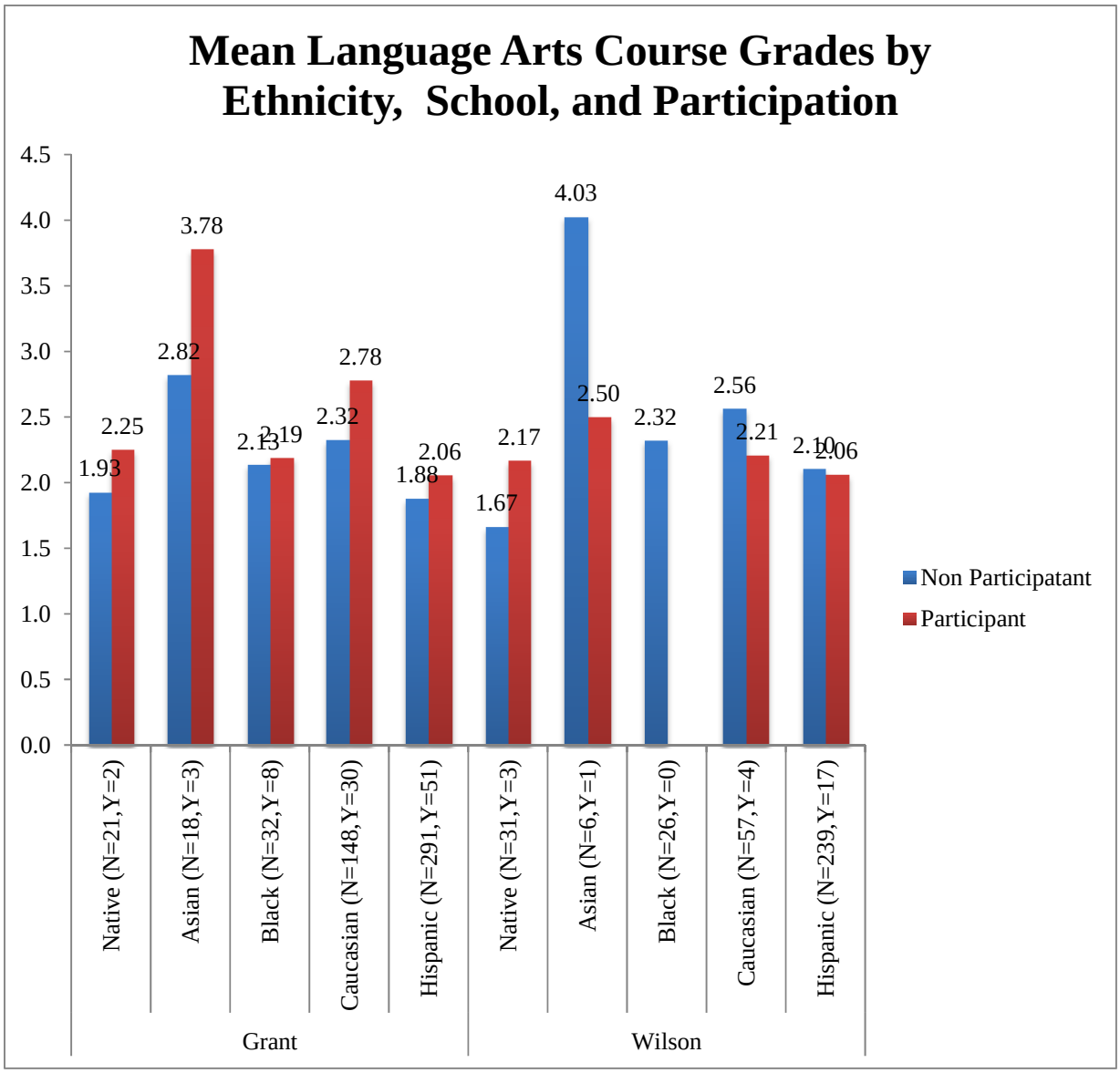

Mean Math Course Grades by Ethnicity, School, and Participation
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2.1
2.2
2.5
3.3
1.9
2.0
2.5
2.6
2.1
2.1
1.5
1.3
1.9
2.3
2.1
2.6
2.6
1.8
1.6
Native (N=23, Y=2)
Asian (N=22, Y=3)
Black (N=34, Y=10)
Caucasian (N=172, Y=40)
Hispanic (N=323, Y=57)
Native (N=36, Y=4)
Asian (N=5, Y=2)
Black (N=33, Y=0)
Caucasian (N=52, Y=4)
Hispanic (N=374, Y=24)
Grant (n=686)
Wilson (n=534)
Non Participatant
Participant

Figure 6



Next, Figures 7 and 8 introduce gender along with ethnicity and participation. For the math course grade averages, a remarkable finding is that Native American female students seemed to be doing well compared to the males and non-participating Native American females. On the other hand, in language arts, with the exception of Native American female students, in most ethnic/gender categories program participants seemed to be doing somewhat better than their peers in terms of course grade averages.

Figure 7

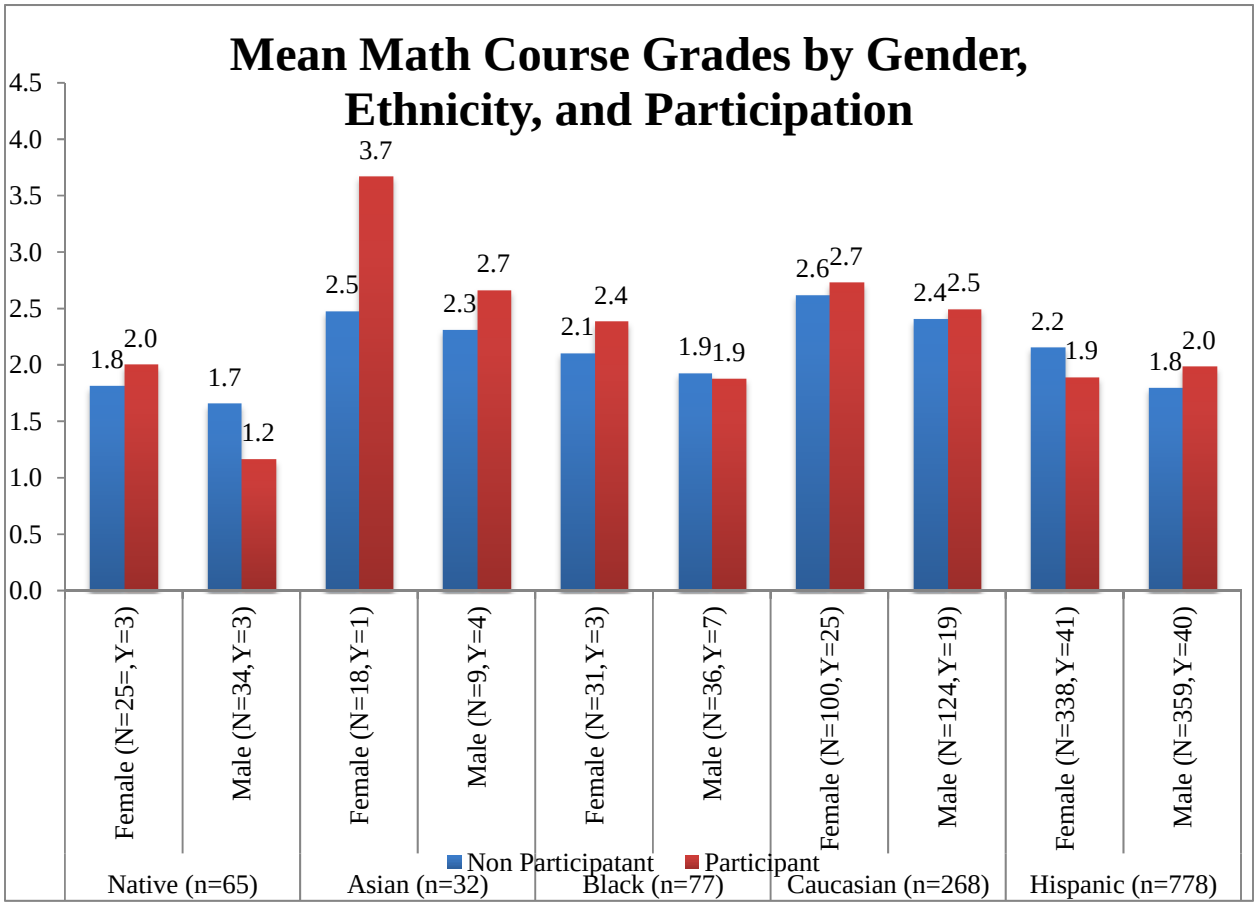
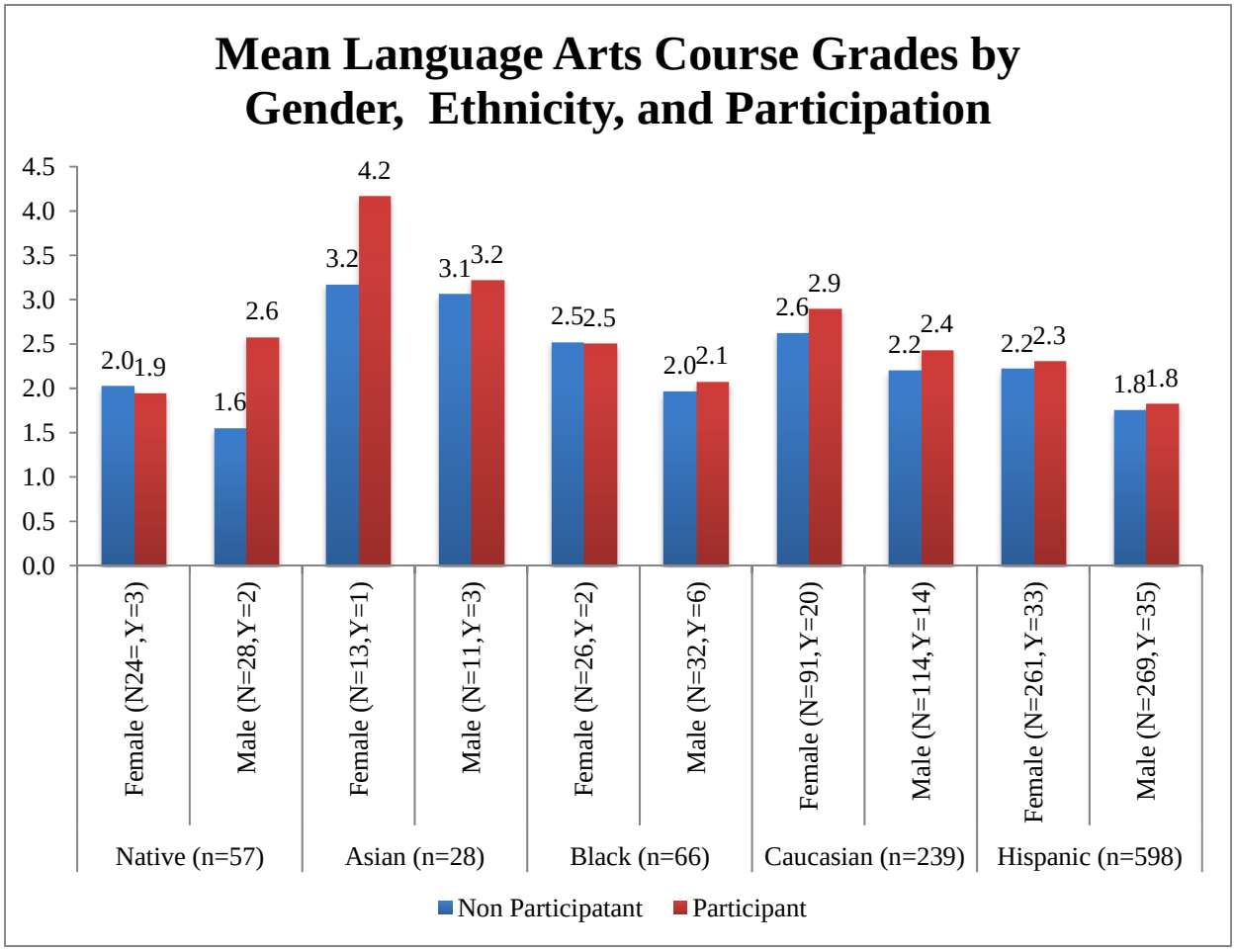

Mean Math Course Grades by Gender, Ethnicity, and Participation
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1.8
2.0
1.7
1.2
2.5
3.7
2.3
2.7
2.1
2.4
1.9
1.9
2.6
2.7
2.4
2.5
2.2
1.9
1.8
2.0
Female (N=25=, Y=3)
Male (N=34, Y=3)
Female (N=18, Y=1)
Male (N=9, Y=4)
Female (N=31, Y=3)
Male (N=36, Y=7)
Female (N=100, Y=25)
Male (N=124, Y=19)
Female (N=338, Y=41)
Male (N=359, Y=40)
Non Participatant
Participant
Native (n=65)
Asian (n=32)
Black (n=77)
Caucasian (n=268)
Hispanic (n=778)

Figure 8



The next two figures provide a contrast between participants and non-participants on SBA achievement scores, groups further differentiated by gender and ethnicity. (The SBA scores actually contain 3 digits; however, the 100s place indicates the grade level. To include all grades in the analysis, the 100s place has been dropped for the purpose of this report.) While the participant numbers are small, and differences in the scores across participants and non-participants modest, nevertheless Figures 9 and 10 strongly suggest that the program participants attained higher SBA scores in both math and language arts compared to non-participants.

Figure 9

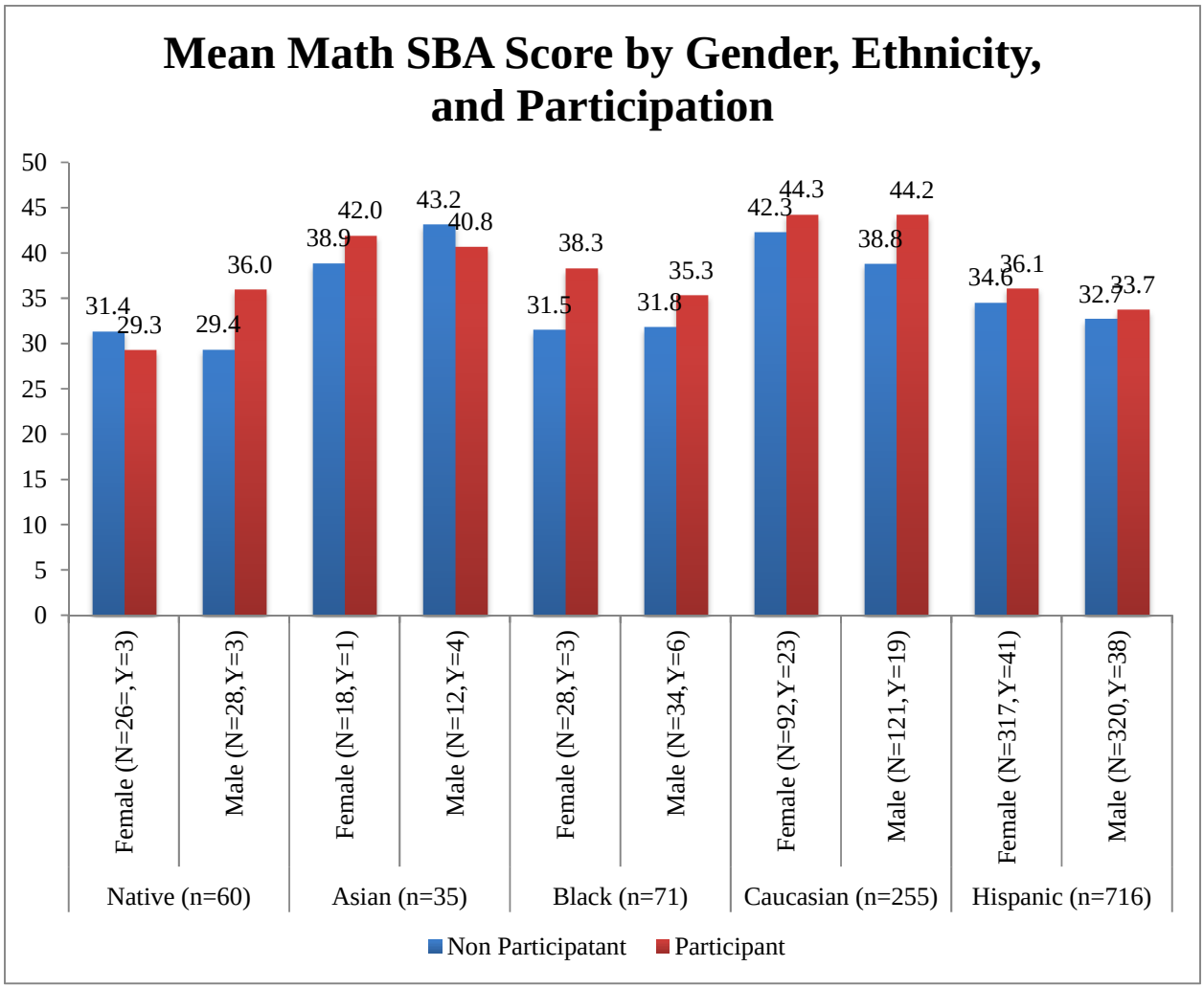
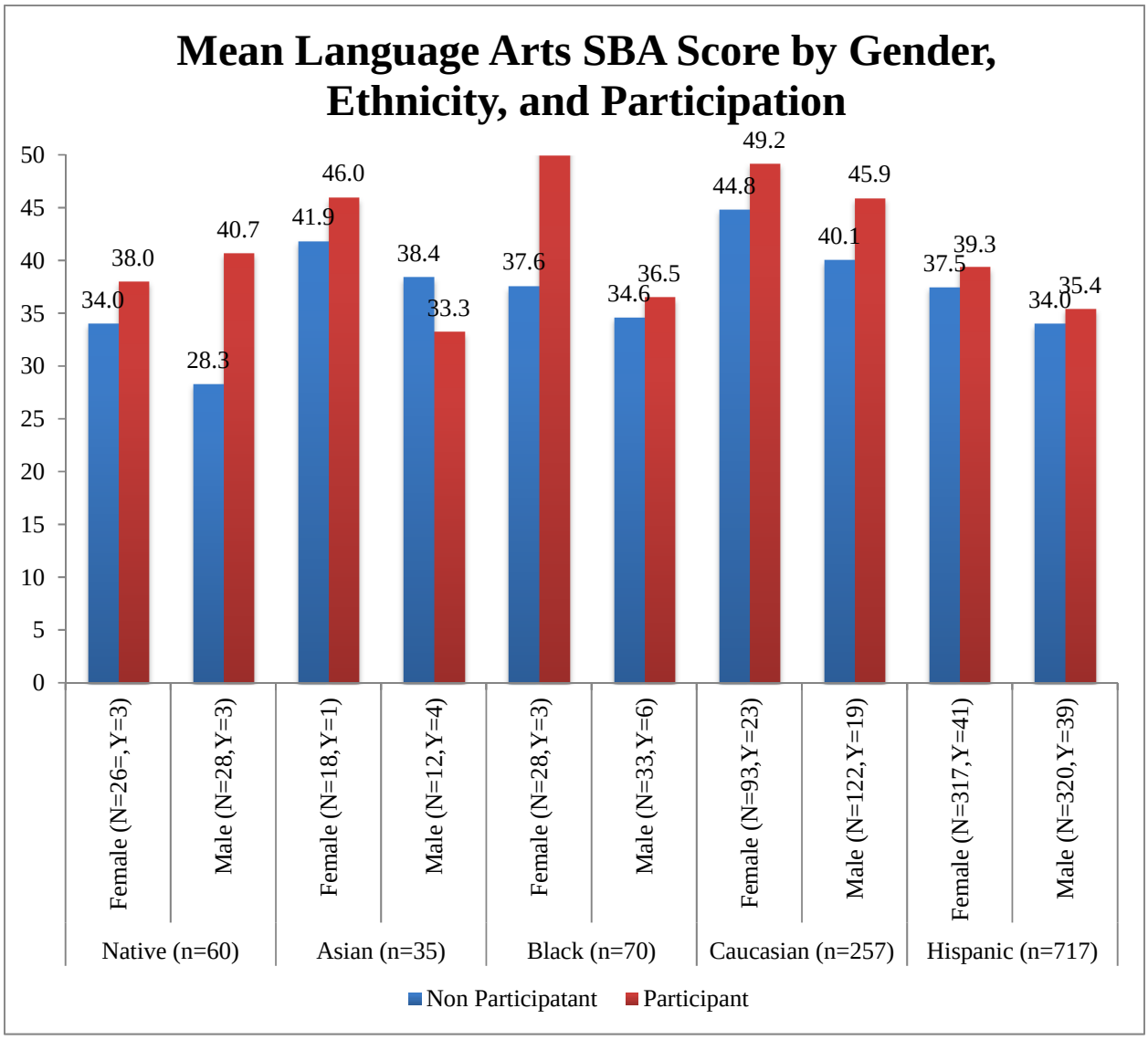

Mean Math SBA Score by Gender, Ethnicity, and Participation
50
45
40
35
30
25
20
15
10
5
0
31.4
29.3
29.4
36.0
38.9
42.0
43.2
40.8
31.5
38.3
31.8
35.3
42.3
44.3
38.8
44.2
34.6
36.1
32.7
33.7
Female (N=26=, Y=3)
Male (N=28, Y=3)
Female (N=18, Y=1)
Male (N=12, Y=4)
Female (N=28, Y=3)
Male (N=34, Y=6)
Female (N=92, Y=23)
Male (N=121, Y=19)
Female (N=317, Y=41)
Male (N=320, Y=38)
Native (n=60)
Asian (n=35)
Black (n=71)
Caucasian (n=255)
Hispanic (n=716)
Non Participatant
Participant

Figure 10



To summarize, preceding figures have presented a comparison between students participating in extended learning opportunities at their schools and their peers not attending the program in terms of achievement as measured by course grade averages and SBA scores on math and language arts. The program participants by and large seemed to score better than non-participants in many categories. The charts also revealed findings that program staff may find useful such as the fact that there were no black students in the Wilson program, and in fact the number of participants itself was small in Wilson. Overall, another glaring finding was ethnic minorities exhibited low scores and grade point averages.

The next section presents a more in-depth analysis of the data and relationships between variables based on regression which allows us to look at relationships when other factors are held constant.

Regression Analysis

Linear regression models were used to look at the impact of several demographic and other explanatory variables on specified dependent variables. Through the use of ordinary least squares (OLS) analysis, we examined the effects of explanatory variables on Mean Math and Language Arts Grades and Mean Math and Language Arts SBA Scores. Negative binomial regression was used for the model in which the dependent variable was absences, a count variable. Grade means were calculated for each student in both content areas.

Some interesting findings emerged from the models. Overall, the R-Squared values were weak, meaning we were not explaining a large portion of variance in the dependent variables. We have reported only the results that were statistically significant at 0.1, or less.

Figure 11 - Mean Math Grades

1. R^2=.4239
2. Both excused as well unexcused absences were associated with a decline in the mean math grade; however, the impact of unexcused absences was greater.
3. The coefficients in Figure 11 show that participating in the extended learning programs early on is more significant to the changes in mean math grades than later on in the year.
4. Students not eligible for the free or reduced-price lunch add 0.25 to their grade average.

Figure 12 - Mean Language Arts Grade

1. R^2=.4642
2. Both excused as well unexcused absences were associated with a decline in the mean language arts grade.
3. Holding all else constant, Asian students experienced greater mean language arts grades that white students.
4. Students not eligible for the free or reduced-price lunch add 0.4 to their grade average.
5. Being in Grant MS is associated with a lowering of average grade in Language Arts.

Figure 13 – Mean Math SBA Scores

1. R^2=.3813
2. Being Black or Native American was associated with an average decline of nearly 4 points in the math SBA scores.
3. Students not eligible for the subsidized lunch witnessed an average gain of 2.6 points on SBA.

4. Students classified as English Language Learners (ELL) experienced almost 7 fewer points on their math SBA score compared to those who were not ELL, all else held constant.

Figure 14 – Mean Language Arts SBA Scores

1. R^2=.3752
2. Being a male as opposed to a female is accompanied by a decline in the language arts SBA score by 1.8 points.
3. Hispanic students experienced an average of 2.3 fewer points on SBA whereas Native American students could expect the SBA score to be lower by 5.7 points than that of Caucasian students.
4. Students with ELL status experienced almost 8 fewer points in their language arts SBA score compared to those who were not ELL, all else held constant.

Figure 11

Mean Math SBA OLS Regression	Coefficient	Std. Err	P>|t|	95% Confidence Interval	
MATH GRADE MEAN	0.313	1.048	0.765	-1.744	2.370
MATH GRADE MEAN SQ	0.631	0.239	0.008	0.162	1.101
Lang. Arts GRADE MEAN	-0.499	0.878	0.57	-2.223	1.225
Lang. Arts GRADE MEAN SQ	0.261	0.199	0.191	-0.130	0.651
Male	0.349	0.634	0.582	-0.894	1.593
Grade 7th	-0.046	0.766	0.952	-1.550	1.457
Grade 8th	0.225	0.773	0.772	-1.293	1.742
Excused - full day	-0.040	0.051	0.436	-0.141	0.061
Unexcused - full day	-0.097	0.070	0.168	-0.235	0.041
Sept. Part. Days	0.148	0.187	0.43	-0.219	0.515
Oct. Part. Days	0.121	0.224	0.59	-0.319	0.561
Nov. Part. Days	-0.329	0.258	0.203	-0.835	0.177
Dec. Part. Days	-0.005	0.595	0.994	-1.174	1.164
Jan. Part. Days	-0.201	0.379	0.597	-0.945	0.543
Feb. Part. Days	0.054	0.262	0.838	-0.460	0.567
Mar. Part. Days	-0.089	0.270	0.743	-0.619	0.442
Apr. Part. Days	-0.060	0.314	0.849	-0.677	0.557
May. Part. Days	0.619	0.387	0.11	-0.139	1.378
Native	-3.776	1.659	0.023	-7.032	-0.520
Hispanic	-1.958	0.807	0.015	-3.542	-0.374
Black	-3.961	1.449	0.006	-6.806	-1.117
Asian	1.477	1.657	0.373	-1.776	4.730
Grant	-0.237	0.711	0.739	-1.633	1.159
Participated Anytime	1.818	1.731	0.294	-1.580	5.217
Lunch status					
Reduced	-1.150	1.375	0.403	-3.849	1.549
Non-Participate	2.601	0.725	<0.001	1.177	4.025
ELL status	-6.984	1.774	<0.001	-10.467	-3.502
Sped Status	-7.262	0.880	<0.001	-8.989	-5.536
_cons	33.667	1.525	<0.001	30.673	36.660

Figure 12

Mean Language Arts SBA OLS Regression	Coefficient	Std. Err	P>|t|	95% Confidence Interval	
MATH GRADE MEAN	0.62	1.08	0.568	-1.50	2.73
MATH GRADE MEAN SQ	0.34	0.24	0.152	-0.13	0.81
Lang. Arts GRADE MEAN	-0.04	1.02	0.969	-2.03	1.96
Lang. Arts GRADE MEAN SQ	0.26	0.22	0.235	-0.17	0.68
Male	-1.82	0.64	0.004	-3.07	-0.57
Grade 7th	1.34	0.80	0.094	-0.23	2.91
Grade 8th	3.53	0.81	<0.001	1.93	5.12
Excused - full day	0.01	0.06	0.909	-0.11	0.12
Unexcused - full day	-0.02	0.06	0.703	-0.15	0.10
Sept. Part. Days	0.17	0.16	0.284	-0.14	0.49
Oct. Part. Days	-0.10	0.21	0.618	-0.51	0.30
Nov. Part. Days	-0.29	0.22	0.179	-0.71	0.13
Dec. Part. Days	0.66	0.55	0.23	-0.41	1.73
Jan. Part. Days	0.26	0.36	0.472	-0.44	0.96
Feb. Part. Days	-0.32	0.22	0.141	-0.75	0.11
Mar. Part. Days	0.19	0.21	0.384	-0.23	0.60
Apr. Part. Days	-0.10	0.35	0.781	-0.79	0.60
May. Part. Days	-0.08	0.68	0.903	-1.42	1.25
Native	-5.69	1.67	0.001	-8.97	-2.41
Hispanic	-2.29	0.85	0.007	-3.96	-0.62
Black	-2.74	1.68	0.104	-6.05	0.57
Asian	-0.28	1.66	0.866	-3.54	2.98
Grant	-0.25	0.72	0.731	-1.67	1.17
Participated Anytime	2.51	2.28	0.271	-1.96	6.99
Lunch status					
Reduced	-2.11	1.24	0.09	-4.54	0.33
Non-Participate	2.92	0.80	<0.001	1.35	4.48
ELL status	-7.96	1.42	<0.001	-10.76	-5.16
Sped Status	-7.79	0.94	<0.001	-9.64	-5.93
_cons	35.73	1.73	<0.001	32.33	39.12

Figure 13

Mean Math Grade OLS Regression	Coefficient	Std. Err	P>|t|	95% Confidence Interval	
MATH GRADE MEAN	0.606	0.083	<0.001	0.443	0.770
MATH GRADE MEAN SQ	-0.029	0.019	0.138	-0.066	0.009
Male	-0.032	0.068	0.634	-0.165	0.101
Grade 7th	0.264	0.080	0.001	0.107	0.421
Grade 8th	0.074	0.083	0.378	-0.090	0.237
Excused - full day	-0.013	0.005	0.009	-0.022	-0.003
Unexcused - full day	-0.025	0.006	<0.001	-0.037	-0.013
Sept. Part. Days	0.036	0.015	0.016	0.007	0.064
Oct. Part. Days	-0.050	0.022	0.026	-0.093	-0.006
Nov. Part. Days	0.011	0.021	0.6	-0.031	0.053
Dec. Part. Days	-0.011	0.052	0.839	-0.113	0.092
Jan. Part. Days	0.064	0.039	0.104	-0.013	0.140
Feb. Part. Days	-0.035	0.026	0.17	-0.086	0.015
Mar. Part. Days	0.043	0.029	0.135	-0.014	0.100
Apr. Part. Days	-0.025	0.033	0.452	-0.088	0.039
May. Part. Days	-0.054	0.055	0.323	-0.162	0.053
Native	-0.222	0.162	0.17	-0.540	0.095
Hispanic	-0.140	0.080	0.081	-0.298	0.017
Black	-0.249	0.131	0.058	-0.506	0.009
Asian	-0.156	0.158	0.323	-0.466	0.154
Grant	-0.058	0.078	0.455	-0.211	0.095
Participated Anytime	-0.088	0.211	0.678	-0.503	0.327
Lunch status					
Reduced	0.023	0.127	0.858	-0.227	0.273
Non-Participate	0.247	0.082	0.003	0.086	0.407
ELL status	-0.391	0.176	0.026	-0.736	-0.046
Sped Status	-0.021	0.080	0.793	-0.177	0.135
_cons	1.325	0.144	<0.001	1.042	1.609

Figure 14

Mean Language Arts Grade OLS Regression	Coefficient	Std. Err	P>|t|	95% Confidence Interval	
MATH GRADE MEAN	0.363	0.088	<0.001	0.189	0.536
MATH GRADE MEAN SQ	0.042	0.021	0.043	0.001	0.082
Male	-0.324	0.070	<0.001	-0.462	-0.186
Grade 7th	0.113	0.085	0.184	-0.054	0.281
Grade 8th	0.232	0.086	0.007	0.064	0.401
Excused - full day	-0.019	0.005	<0.001	-0.029	-0.008
Unexcused - full day	-0.020	0.006	0.001	-0.032	-0.008
Sept. Part. Days	-0.019	0.020	0.344	-0.057	0.020
Oct. Part. Days	0.002	0.033	0.96	-0.063	0.066
Nov. Part. Days	0.005	0.032	0.869	-0.058	0.069
Dec. Part. Days	-0.004	0.059	0.948	-0.119	0.112
Jan. Part. Days	-0.072	0.036	0.044	-0.142	-0.002
Feb. Part. Days	0.060	0.025	0.016	0.011	0.109
Mar. Part. Days	-0.080	0.026	0.002	-0.132	-0.029
Apr. Part. Days	0.015	0.033	0.651	-0.051	0.081
May. Part. Days	0.072	0.061	0.238	-0.047	0.191
Native	-0.142	0.174	0.415	-0.482	0.199
Hispanic	-0.069	0.084	0.408	-0.233	0.095
Black	0.100	0.141	0.478	-0.177	0.377
Asian	0.530	0.195	0.007	0.148	0.912
Grant	-0.180	0.079	0.024	-0.336	-0.024
Participated Anytime	0.328	0.202	0.105	-0.068	0.724
Lunch status					
Reduced	0.219	0.126	0.083	-0.028	0.467
Non-Participate	0.400	0.086	<0.001	0.231	0.570
ELL status	0.485	0.167	0.004	0.156	0.814
Sped Status	0.581	0.086	<0.001	0.414	0.749
_cons	1.136	0.154	<0.001	0.835	1.437

Next, in Figure 15, the dependent variable was “Total Absences” – unexcused and excused combined. The rationale behind it was that, since absences result in lower achievement, it would be fruitful to be able to predict who was likely to miss school. Because ‘absences’ is count data, it was appropriate to use poisson regressions. However, since overdispersion exists, we instead

used negative binomial regression which is well suited to handle overdispersed count data. Some noteworthy findings for the dependent variable "Total Absences" from the Margins tables are presented below. The tables for excused absences and unexcused absences are placed in the Appendix Section.

Total Absences

1. Asian students missed 6.8 fewer days of school on average compared to the Caucasian students, all else constant.
2. If you attended Grant MS, you missed 2.5 fewer days of school on average compared to the Wilson students, all else constant.
3. Students in 7th and 8th grades missed 3 more days of school on average than the 6th graders.

Figure 15

Total Absences Negative Binomial Regression	Coefficient	Std. Err	P>|z|	95% Confidence Interval	
MATH GRADE MEAN	-0.184	0.907	0.839	-1.963	1.594
MATH GRADE MEAN SQ	-0.359	0.202	0.076	-0.755	0.038
Lang. Arts GRADE MEAN	-3.696	0.862	<0.001	-5.385	-2.006
Lang. Arts GRADE MEAN SQ	0.493	0.192	0.01	0.116	0.869
Male	0.049	0.596	0.934	-1.120	1.218
Grade 7th	3.076	0.771	<0.001	1.564	4.587
Grade 8th	3.251	0.764	<0.001	1.754	4.748
Native	-0.495	1.320	0.708	-3.082	2.092
Hispanic	-0.857	0.752	0.255	-2.332	0.618
Black	-1.479	1.193	0.215	-3.818	0.859
Asian	-6.791	2.095	0.001	-10.897	-2.686
Grant	-2.596	0.631	<0.001	-3.833	-1.359
Participated Anytime	-0.175	0.911	0.848	-1.961	1.611
Lunch status					
Reduced	-3.327	0.824	<0.001	-4.942	-1.712
Non-Participate	0.147	0.796	0.853	-1.412	1.707
ELL status	-0.039	1.613	0.981	-3.200	3.122
Sped Status	3.881	0.721	<0.001	2.467	5.294

CONCLUSIONS

1. Both Grant and Wilson incorporated all key elements of the Elev8 full-service community school model in 2011-12. YDI-Elev8 had a strong presence in these schools and provided comprehensive services consistent with the model.
2. A large number of students in both schools took advantage of Elev8 healthcare and extended learning services.

Student Demographics and Performance

1. Wilson had a higher proportion of low-income and diverse minority students compared to Grant. Students participating in the Elev8 extended learning programs in Grant seemed to be doing slightly better on course grades and SBA than those in Wilson. This supports the well-documented finding that poverty and minority status are associated with low academic performance.
2. Wilson students **not** in the program seemed to have better grade averages than those in the program. This could mean that the students most in need of strong academic support were in fact in the extended leaning programs.
3. Minority student groups, whether in the program or not, generally had low averages in math and language arts.
4. Female students who participated in the extended learning programs performed better in math as well as language arts courses across most ethnic categories.

Regression Analysis

1. The most critical finding was that, when variables such as lunch status and ethnicity were controlled for, any relationship between program participation and academic achievement disappeared. In other words, when known explanations such as poverty and ethnicity were controlled for, being in the program had no independent impact on student achievement or absences.
2. Both excused as well unexcused absences were associated with a decline in the mean math and language arts grade. However, the impact of unexcused absences was greater for math performance. This confirms what we already sense to be the case.
3. Students not eligible for the free or reduced-price meals, i.e. non-low-income, performed slightly better than students eligible for subsidized meals.
5. Black, Native American, and Hispanic students' SBA scores were slightly lower than those of their Caucasian peers.
6. English Language Learners (ELL) had lower SBA scores on both math and language arts compared to those not classified as ELL, all else held constant.
7. Caucasian students missed school the most, Asian students missed the least, all else held constant.
8. Students in 7^{th} and 8^{th} grades missed more days of school on average than the 6^{th} graders.

DISCUSSION

What does it all mean? The findings reported here may have merit for program improvement and policy implications. For instance, Evidence-based information on absences, or analysis showing which demographic subgroups are most likely to benefit by participating in the programs, may help program planning and focus.

The results presented here raise more questions than they provide answers for. As indicated earlier, we worked with available but incomplete data. Because individual level healthcare participation data were not available, we worked only with the data on extended-learning participants. Without clear and exclusive treatment and comparison groups, it is not possible to assess program impact. Another issue is selection bias. Did the program fuel student success or did successful students join the program in the first place?

The results provided here were based on simple analytic tools and basic regressions, and incomplete and imperfect data. Both OLS and negative binomial analyses provide useful insights into possible questions to be answered in the future with more thorough modeling techniques. For instance, more sophisticated statistical techniques will allow us to remove selection bias from the analysis, and we may be able to identify what programs are beneficial for which student groups. We aspire to be able to identify students' needs and programs that best meet those needs, which will help Elev8 to succeed further and refine policy towards reducing achievement gap and high school drop-out rates.

The results reported here for the 2011-12 school year clearly show that poverty and minority status had negative impact on achievement and that gender was a factor in achievement. Elev8 full-service community school model is designed to support students and help counter their disadvantages in being successful in school. CEPR evaluators will undertake a three-year longitudinal cohort study to measure Elev8's impact on the students in the middle grades in improving their high school preparedness and keeping them on-track to graduation. The future evaluation with a strong research design based on longitudinal data will help program improvement and have policy implications for educators and policy makers at local and national levels.

RECOMMENDATIONS

1. CEPR evaluators recommend that de-identified student-level data on healthcare be made available for the evaluation.
2. CEPR also recommends that data related to family and community supports and participation in Family Resource Center services and activities be meticulously maintained and made available to the evaluators for the future evaluation.

3. CEPR requests that unique and illustrative individual stories about Elev8 students be made available to add to the analytic report on Elev8's impact on students, families, and school communities.

Appendix A

Student Participation in Extended Learning in Elev8-New Mexico Schools (2011-12)

Gadsden Middle School – 95 students in the ELev8 afterschool program

Laguna Middle School – 122 students in the afterschool program

Native American Charter (NACA) – 106 students in the afterschool program

Grant Middle School – 133 afterschool programs

Wilson Middle School – 44 students in the afterschool programs

Appendix B School-Based Healthcare – Unique Visitors

Elev8 SBHC Unique Visitors	2009-2010 (Elev8 Year III)	2010-2011 (Elev8 Year IV)	2011-2012 (Elev8 Year V)
Gadsden	359	244	278
Grant	524	318	295
Laguna	206	165	210
NACA	143	160	40
Wilson	360	338	216
TOTAL	**1592**	**1225**	**1039**

Elev8 SBHC Unique Visitors % of Total School Population	2009-2010 (Elev8 Year III)	2010-2011 (Elev8 Year IV)	2011-2012 (Elev8 Year V)
Gadsden	45%	29%	34%
Grant	69%	44%	45%
Laguna*	138%	114%	169%
NACA	49%	73%	19%
Wilson	68%	67%	41%
Overall	**63%**	**50%**	**44%**

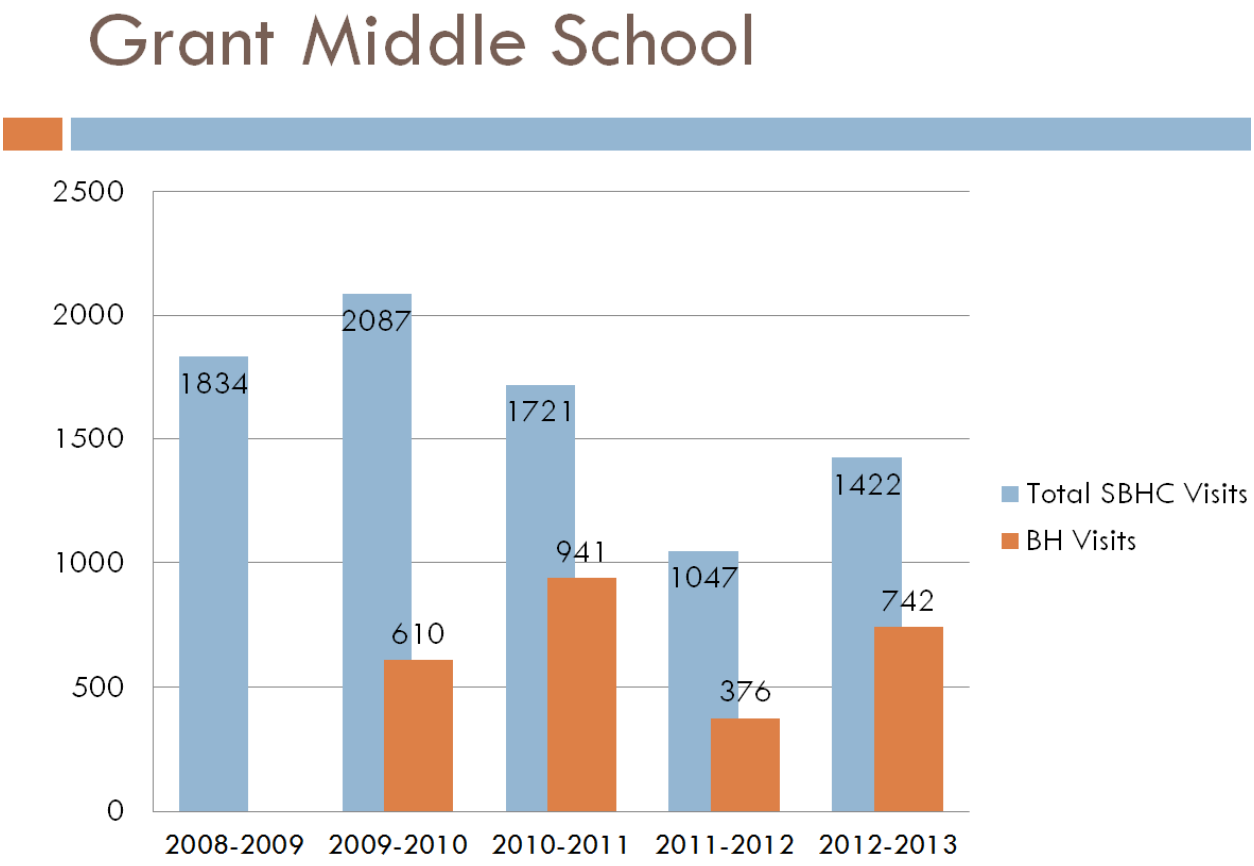
*In Laguna, elementary school children visited the SBHC at Laguna Middle School, hence the percentage of students exceeded 100%, or the total percentage of students enrolled in Laguna Middle School.

Elev8 SBHC Behavioral Health Visits	2009-2010 (Elev8 Year III)	2010-2011 (Elev8 Year IV)	2011-2012 (Elev8 Year V)
Gadsden	714	465	280
Grant	610	941	376
Laguna	601	586	579
NACA	111	125	78
Wilson	638	420	154
Overall	**2674**	**2537**	**1467**

Elev8 SBHC % of Behavioral Health of Overall Visits	2009-2010 (Elev8 Year III)	2010-2011 (Elev8 Year IV)	2011-2012 (Elev8 Year V)
Gadsden	42.3%	55.8%	39.5%
Grant	29.3%	54.8%	35.9%
Laguna	65.1%	70.7%	59.5%
NACA	18.9%	20.6%	53.8%
Wilson	36.2%	26.9%	22.6%
Overall	**38.4%**	**45.8%**	**41.3%**

Appendices C-E Grant Middle School Elev8 Profile

Appendix C School-Based Healthcare



Appendix D Elev8 Programs

Grant Middle School 2011-2012

Services Detail (Elev8 NM funded or leveraged services)

Extended Learning

TUTORING/HOMEWORK SUPPORT

- YMCA Staff and Golden Apple Foundation Scholars provide core subject support (MicroUniversity) 4:30pm – 5:30pm
- On campus SES tutoring (YDI, Rio Grande Education Collaborative, 1+1 Tutoring and Writing and Reading specialist)

Y-MICROSOCIETY, 3:15pm – 5:30pm (M-Th)

An evidence based program that focuses real life learning where student build their own society by learning to run businesses (ventures), apply technology, develop government and social agencies, and create cultural and arts organizations. Ventures are facilitated by trained youth development staff, Golden Apple Foundation Scholars and community volunteers. Core ventures include but not limited to:

- World Café
- Government/Speech & Debate*
- Finance (Bank)
- Peace Keepers (Law Enforcement/Fitness exploration)
- STEM (Science, Technology, Engineering and Mathematics)**
- Media Arts (In collaboration with the YDI Mi Voz media program)
- Art (primarily mixed media focus)
- Independent Start Ups

**This ventures are paid through the Elementary Middle School Initiative (EMSI)*
***Two days funded through Sandia Labs w/certified teaching staff*

Teen Outreach Program (TOP), 4:30pm – 5:30pm (M-Th)

TOP is a school attachment and risk prevention program that focuses on positive decision making and service learning. In addition to group time students participate in 20 hours of service learning per year.

Big Brothers Big Sisters Mentoring Program (EXTERNAL PARTNER)

Community based program where matches can meet anytime.

Family Engagement & Supports

FAMILY ENGAGEMENT & SUPPORTS (M-F, Some Saturdays and evenings)

- Family Resource Center operation (VISTA Volunteers staff and manage the FRC)
  - The FRC is a place where parents can meet as well as use computers and get information/support.
  - Houses the PTA, Watch DOGS (Dads of Great Students) Family Outreach Team and Family Supports teams
- Home Visits that include:
  - Information sharing
  - Program outreach
  - Service referral; Completion and collection of registration/consent forms
  - Parent volunteer recruitment
  - Student academic support information
- Family Outreach and communication not related to home visits
- Parent Organization support
- Parent Advocacy
  - Parent workshops (including but not limited to Creating a College Culture or School Navigation)

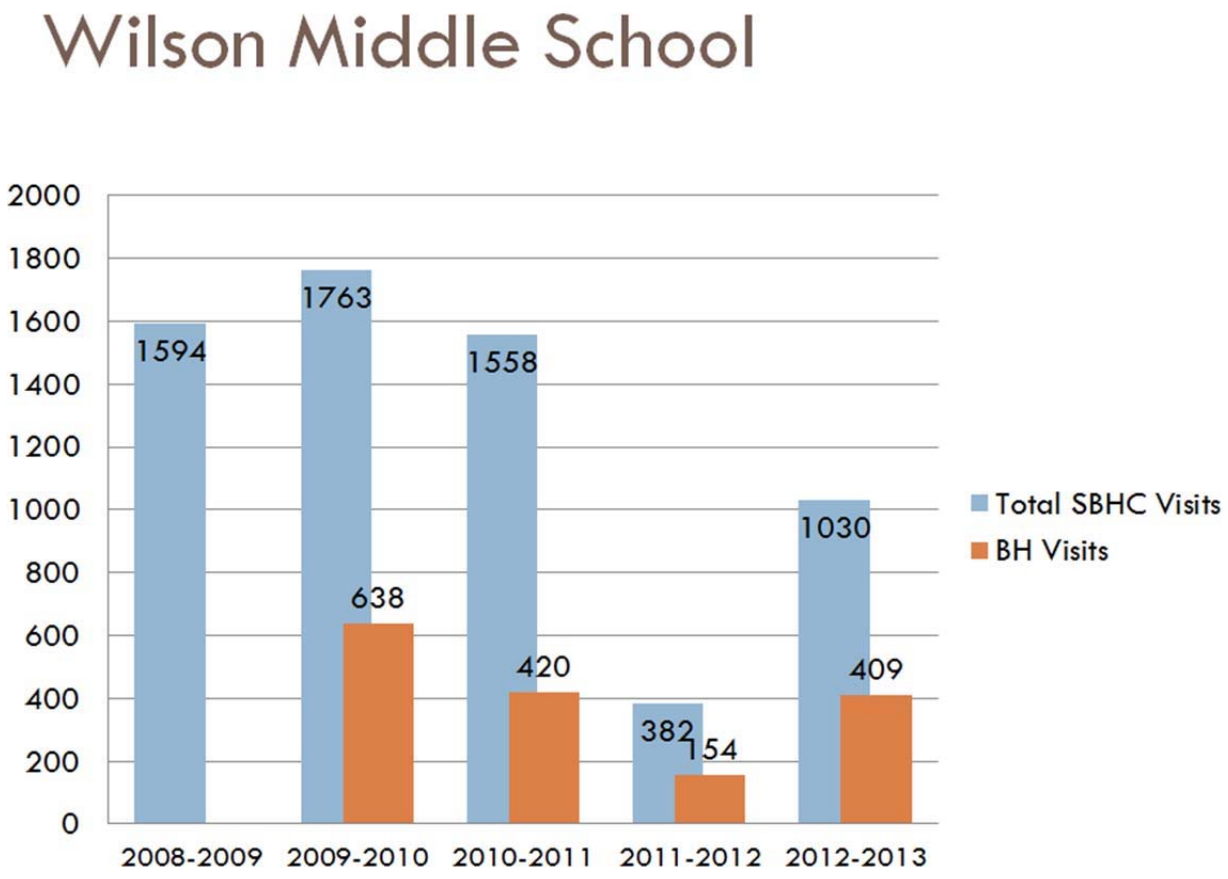
FAMILY SUPPORTS

The FRC team links families to supports services through a referral and follow up system. Direct service may be provided through a YDI Community Support Worker or FRC team based on need and FRC team capacity. The FRC team will support families in accessing service needs including:

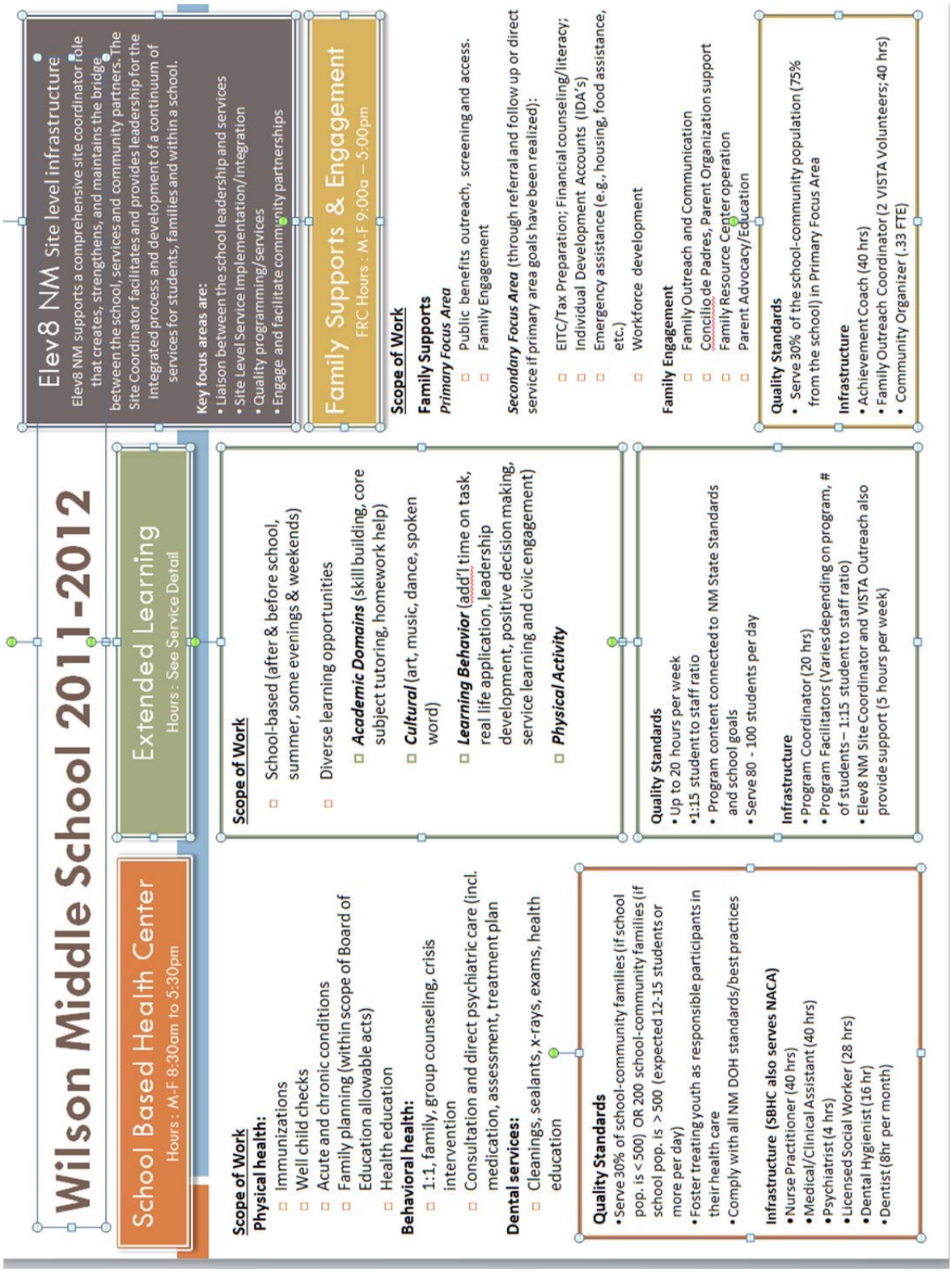
- Public benefits including SNAP, Medicaid and Free and Reduced Lunch with follow-through to confirmation of receipt of services
- Critical need areas such as school supplies, clothing, food, utilities, housing, transportation.

Appendices F-H Wilson Middle School Elev8 Profile

Appendix F School-Based Healthcare



Appendix G Elev8 Programs



Wilson Middle School 2011-2012

Services Detail (Elev8 NM funded or leveraged services)

Extended Learning

BEFORE SCHOOL
Tutoring (7:40am -8:10am)
- Morning Math provided by Certified Teachers

Morning Programs
- Morning Basketball (M-Th) 7:40am – 8:10am
- Breakfast Club (M-Th) 7:40am – 8:10am
- Welcome to the Library (M-F) 7:40am – 8:10am

AFTERSCHOOL (3:15pm – 5:30pm)

Elementary Middle School Initiative (EMSI) funded by City of Albuquerque
Afternoon Programs
- Afternoon Homework Club (M-Th) 3:15pm – 4:15pm
- Weight Training (Sem. 1/T-Th) 3:15pm – 4:15pm
- Swimming (Sem. 1/T-Th) 3:15pm – 4:15pm
- Tennis (T &Th) 3:15-5:00pm

District Sponsored (funded by APS)
- Basketball (Girls/Boys, M-Th, Fall)
- Volleyball (M-Th, Fall)
- Track (M-Th, Spring)

Title 1 (funded by APS)
- Phonics- Decoding Words (T-Th) 3:15pm – 4:15pm
- Skills for Success (M-Th) 3:15pm-4:15pm
- Performing Arts (M & W) 3:15pm – 4:15pm
- Literacy Through Technology (T, W) 3:15pm – 4:15pm
- Debate (T & Th) 3:15pm – 4:15pm
- Student Government (Th) 3:15pm – 4:15pm
- Science Olympiad (W & Th) 3:15pm – 4:15pm
- Literacy Through Non-Fiction (Th) 3:15pm – 4:15pm
- Chess (M) 3:15pm-4:15pm

Family Supports & Engagement

FAMILY SUPPORTS (M-F 9am-5pm on average)
- Public benefits outreach, screening and access. with a targeted focus on SNAP, Medicaid and Free and Reduced Lunch with follow-through to confirmation of receipt of services
- Family Engagement (to be defined by the needs assessment)
- Family services needs assessment in collaboration with Family Outreach team
- Site specific services/activities to be determined by needs assessment & capacity

FAMILY ENGAGEMENT (M-F, Some Saturdays and evenings)
- Family Resource Center operation (VISTA Volunteers staff and manage the FRC)
  - The FRC is a place where parents can meet as well as use computers and get information/support.
  - Houses the Concilio de Padres, Family Outreach Team and Family Supports teams
- Home Visits include:
  - Information sharing
  - Program outreach (SES, EL/FS/SBHC, WMS, etc)
  - Service referral
  - Completion and collection of registration/consent forms
  - Parent volunteer recruitment
- Family Outreach and communication not related to home visits
- Concilio de Padres support
- Parent Advocacy
  - Parent workshops (including but not limited to Creating a College Culture, School Navigation and Access to Community Resources)

Appendices I-J Regression Tables

Appendix I

Excused Full-Day Absences Negative Binomial Regression	Coefficient	Std. Err	P>|z|	95% Confidence Interval	
MATH GRADE MEAN	0.77	0.67	0.253	-0.55	2.09
MATH GRADE MEAN SQ	-0.38	0.15	0.015	-0.68	-0.07
Lang. Arts GRADE MEAN	-1.98	0.61	0.001	-3.17	-0.78
Lang. Arts GRADE MEAN SQ	0.24	0.14	0.076	-0.03	0.51
Male	0.29	0.44	0.503	-0.56	1.14
Grade 7th	1.66	0.58	0.004	0.52	2.79
Grade 8th	2.07	0.56	<0.001	0.97	3.17
Native	-1.35	1.08	0.213	-3.47	0.77
Hispanic	-1.18	0.57	0.038	-2.29	-0.06
Black	-2.59	0.93	0.005	-4.42	-0.76
Asian	-4.27	1.61	0.008	-7.42	-1.13
Grant	-0.56	0.47	0.231	-1.48	0.36
Participated Anytime	0.29	0.69	0.673	-1.06	1.64
Lunch status					
Reduced	-2.75	0.61	<0.001	-3.94	-1.55
Non-Participate	1.00	0.59	0.09	-0.15	2.15
ELL status	-2.63	1.05	0.012	-4.69	-0.58
Sped Status	3.01	0.54	<0.001	1.96	4.06
_cons					

Appendix J

Unexcused Full-Day Absences Negative Binomial Regression	Coefficient	Std. Err	P>|z|	95% Confidence Interval	
MATH GRADE MEAN	-0.96	0.52	-1.84	-1.99	0.06
MATH GRADE MEAN SQ	0.03	0.12	0.22	-0.20	0.26
Lang. Arts GRADE MEAN	-1.48	0.50	-2.94	-2.47	-0.49
Lang. Arts GRADE MEAN SQ	0.18	0.11	1.61	-0.04	0.40
Male	-0.41	0.35	-1.15	-1.10	0.28
Grade 7th	1.60	0.45	3.58	0.73	2.48
Grade 8th	1.16	0.44	2.65	0.30	2.02
Native	1.10	0.69	1.6	-0.25	2.45
Hispanic	0.65	0.43	1.51	-0.20	1.50
Black	1.52	0.68	2.23	0.19	2.85
Asian	-2.69	1.09	-2.48	-4.82	-0.56
Grant	-2.06	0.36	-5.69	-2.77	-1.35
Participated Anytime	-0.45	0.52	-0.87	-1.46	0.56
Lunch status					
Reduced	-0.32	0.62	-0.51	-1.54	0.91
Non-Participate	-1.06	0.41	-2.58	-1.87	-0.26
ELL status	1.81	0.90	2.02	0.05	3.58
Sped Status	0.98	0.39	2.51	0.21	1.74
_cons					
MATH GRADE MEAN	-0.96	0.52	-1.84	-1.99	0.06
MATH GRADE MEAN SQ	0.03	0.12	0.22	-0.20	0.26