SLASHING SPORTS: A NATIONAL STUDY EXAMINING THE CORRELATION

BETWEEN ATHLETIC INVOLVEMENT AND ACADEMIC SUCCESS

DATA COLLECTION AND ANALYSIS REPORT

BY

DR. ANTHONY G. PRICE, JR.

July, 2013

Abstract

As a result of a historically tough economic time for scores of Americans including the schools their children attend. The academic success of approximately 550,000 to 725,000 high school student-athletes and non-athletes during the 2011-12 school year was analyzed across the nation. The study identified a significant correlation between athletic involvement and the academic success indicators of graduation rates, dropout rates, average daily attendance, and average letter grades. Graduation rates ranked the highest according to significance during the study. Graduation rates were followed not surprisingly by dropout rates. Average daily attendance ranked third and although average letter grades contributed the smallest level of correlation, non-athletes earned a 2.72 GPA while student-athletes earned an overall 3.01 respectively. The results of every academic success category demonstrated student-athletes achieving greater than non-athlete.

DATA COLLECTION AND ANALYSIS

Introduction

This studies purpose was to examine the correlation between athletic involvement and academic success in high school students during the 2011-12 school year. The researcher utilized a quantitative nonexperimental design for answering the research question and testing the hypotheses. Data was retrieved through an online survey sent to thousands of American schools that sponsor interscholastic athletic programs. School administrators reported on the survey the percentage distribution of athletes and non-athletes to measure the extent the distribution is related to academic success. The academic success data included graduation rates, dropout rates, average daily attendance, and average letter grade from the participating schools. Further information gathered on schools to identify external factors that impact the study results include state location of school, school size, school setting, school type, and whether the school's athletic program suffered budgetary reductions during the previous four years. This chapter will present the study results in evaluating how and to what extent athletic involvement impacts student academic success and test the hypotheses. The hypotheses that guided the study are the following:

H_1: There is a statistical significant correlation between high schools with greater athletic involvement and higher cumulative letter grade averages for high school students.

H_0: There is no statistical significant correlation between high schools with greater athletic involvement and higher cumulative letter grade averages for high school students.

H_2: There is a greater statistical significant correlation between high schools with greater athletic involvement and higher high school average daily attendance.

H_0: There is not a greater statistical significant correlation between high schools with greater athletic involvement and higher high school average daily attendance.

H_3: There is a greater statistical significant correlation between high schools with greater athletic involvement and lower high school dropout rates.

H_0: There is not a greater statistical significant correlation between high schools with greater athletic involvement and lower high school dropout rates.

H_4: There is a greater statistical significant correlation between high schools with greater athletic involvement and higher high school graduation rates.

H_0: There is not a greater statistical significant correlation between high schools with greater athletic involvement and higher high school graduation rates.

Descriptive Data

Participants in the study vary greatly depending on the respective school structure. Information collected from the survey was reported as group data; therefore the researcher was unable to describe the exact individual participating in the research. However in most cases the person submitting the data was an Athletic Administrator, Director, Coordinator, Guidance Counselor, Assistant Principal, or School Principal respectively. The research study utilized a random probability sample of American high

schools that sponsor athletic programs under the National Federation of State High

School Associations (NFHS) organizational structure. The national survey questionnaire

was transmitted via email through the National Interscholastic Athletic Administrators

Association (NIAAA) and the schools State Athletic Association. The time for schools to

respond to the survey was five weeks.

The survey collection of data emphasized athletic involvement and academic

success outcomes for analyzing the research question and testing the hypothesis. Athletic

involvement was defined as a student participating on a school sponsored sports team and

therefore considered the student an athlete. Only students involved on a high school

interscholastic team that is a member school of their state athletic association sanctioned

by the National Federation of State High School Associations (NFHS) qualified for the

study. The contrary of an athlete is a non-athlete which is a student not participating on a

school sponsored sports team. A State Athletic Association is an organization with the

authority from the NFHS and state government officials to oversee interscholastic athletic

participation and rules of play for the respective state.

The academic success data reported for student achievement is identified through

the four categories of graduation rates, dropout rates, average daily attendance (ADA),

and average letter grade. A school's graduation rate, defined by the Department of

Education, is a benchmark of a four year adjusted cohort formula for calculating high

school completion (U.S. Department of Education, 2013). As of the 2011-12 school year,

every state began reporting graduating rates utilizing the four year adjusted cohort

calculation on one public document (U.S. Department of Education, 2013). Prior to the

2011-12 school year graduation rates on a national scale was not reported utilizing a

common form, formula, or instrument resulting into inconsistent data results when comparing states. Nationally dropout rates are reported by calculating the number of sixteen through twenty-four year olds who are not attending school nor received a diploma or equivalent credential (NCES, 2013c). Average letter grade was reported and coded by assigning the numerical value of 4 to A, 3 to B, 2 to C, 1 to D, and 0 to F for the 2011-12 school year. Average daily attendance (ADA) is reported and calculated by dividing the total number of days of student attendance by the number of days of school taught during the same period (NCES, 2012). State funding is generally connected to the ADA in some capacity as accountability on funds that directly affect students' success. Samples of ADA calculations are presented in Table 1.

Table 1. Average Daily Attendance (ADA) Formula Samples

Tu has perfect attendance, calculated this way:

142 days attended ÷ by 142 days of school taught = 1.0 ADA or 100%

Jewels attended 136 of the 142 days taught, calculated this way:

136 days attended ÷ by 142 days of school taught = .96 ADA or 96%

Further data was gathered from participants to identify external factors that may impact the study results. These factors include state location of school, school size, school setting, school type, and whether the school's athletic program suffered budgetary reductions during the previous four years. School grade levels had four categories of sixth through twelfth grade, seventh through twelfth grade, ninth through twelfth grade, and

tenth through twelfth grade to classify the difference among the school grade levels. School enrollment had five categories of 0-499, 500-999, 1000-1499, 1500-1999, and schools with 2000 students and above. School setting had three categories of urban community, suburban community, and rural community to classify the difference among the school demographic setting. Lastly, school type is determined by the three categories of public, private, charter to classify the different school types.

Data Analysis

The data was analyzed filtering the data results to identify high schools with less than 50% athletic involvement and high schools with greater than 50% athletic involvement as well as utilizing SPSS software for evaluating the Pearsons correlation and ANOVA between athletic involvement and academic success. The data was exported from SurveyMonkey.com and inputted into SPSS. Once the data completed transmitting into SPSS the researcher coded the data for statistical purpose. Through using the "transform" feature in SPSS, numerical value was assigned to the categories. Grade level was assigned the numerical number one for 6 to 12, number two for 7 to 12, number three for 9 to 12, and number four for 10 to 12 grade schools. School enrollment was assigned the numerical number one for 0 to 499, number two for 500 to 999, number three for 1000 to 1499, number four for 1500 to 1999, and number five for school with enrollment 2000 and higher. School setting was assigned the numerical number one for urban, number two for suburban, and number three for rural school setting. School type was assigned the numerical number one for public, number two for private, and number three for charter schools. Graduation rates were assigned the numerical number seven for 98% to 100%, number six for 95% to 97%, number five for 90% to 94%, number four for 85%

to 89%, number three for 80% to 84%, number two for 75% to 79%, number one for

schools graduations rates between 0% to74%. Dropout rates were assigned the numerical

number seven for 0% to 2%, number six for 3% to 5%, number five for 6% to 9%,

number four for 10% to 14%, number three for 15% to 19%, number two for 20% to

24%, and number one for school dropout rates 25% to 100%. ADA was assigned the

numerical number seven for 98% to 100%, number six for 95% to 97%, number five for

90% to 94%, number four for 85% to 89%, number three for 80% to 84%, number two

for 75% to 79%, number one for schools graduations rates between 0% to74%. Budget

reduction was assigned the numerical number one for no and number two for school

indicating yes there was a budget reduction in the last four years. At the completion of

the coding procedure the research cross referenced originally data to ensure no errors

occurred during this process.

Results

High schools ($N = 7,000$) across the nation were sent an email from the National

Interscholastic Athletic Administrators Association containing a link to a web-based

survey. A total of 1,067 school participants started the survey while 961 completed

(90.1% completion rate) with an estimated response rate of 14%. Approximately 550,000

to 725,000 students were represented by respective schools that participated. The number

of state responding schools ($N = 49$) in this sample ranged from 1 to 159 ($M = 19.6$, $SD =$

27.2)

Demographics and Statistical Data

Shown on Figure 1, participating school grade levels reported were 158 (16.4%)

from grade levels 6 through 12, 153 (15.9%) from grade levels 7 through 12, 608 (63.3%)

6

from grade levels 9 through 12, and 42 (4.4%) from grade levels 10 through 12

respectively. Shown on Figure 2, participating school enrollments reported 386 (40.2%)

with 0 to 499 students, 253 (26.3%) with 500 to 999 students, 130 (13.5%) with 1000 to

1499 students, 102 (10.6%) with 1500 to 1999 students, and 90 (9.4) with student

enrollment 2000 and above respectively. Shown on Figure 3, participant school settings

reported 173 (18.0%) from urban communities, 336 (35.0%) from suburban communities,

452 (47.0%) from rural communities respectively. Shown on Figure 4, participant school

types reported 736 (76.6%) from public schools, 201 (20.9) from private schools, and 24
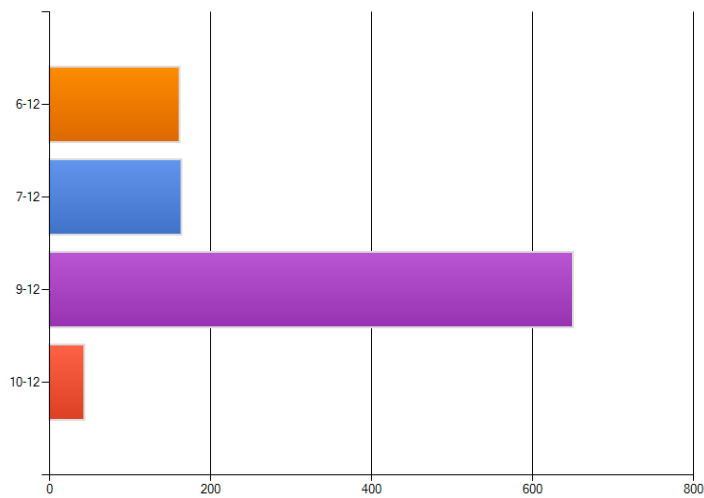
(2.5%) from charter schools respectively.

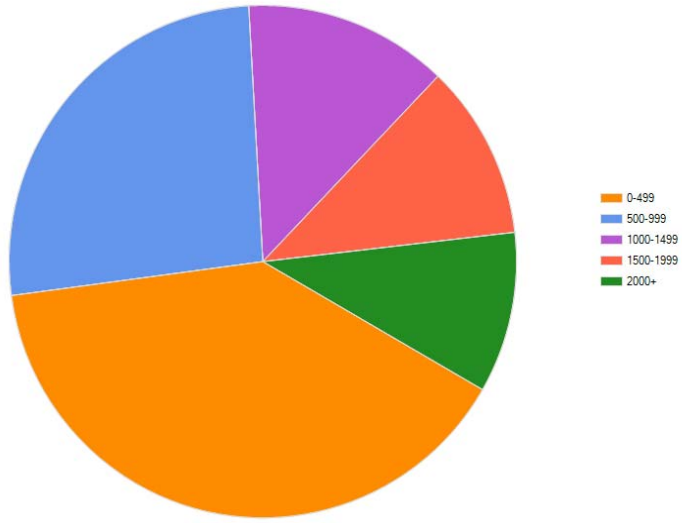Figure 1. Grade Level Distribution
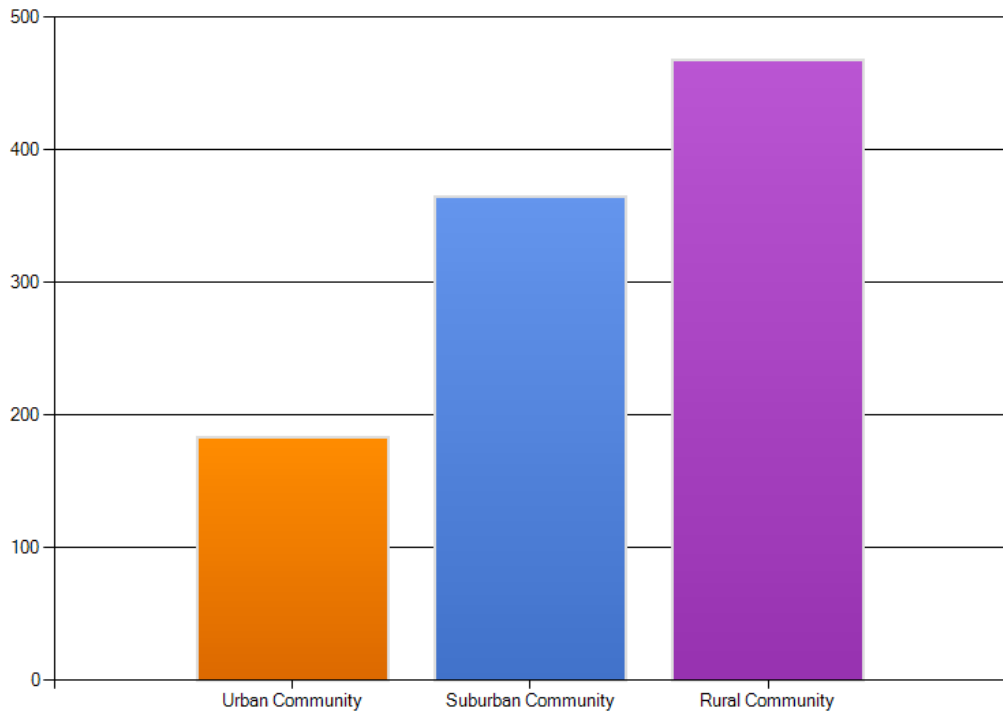
Figure 2. School Enrollment Distribution
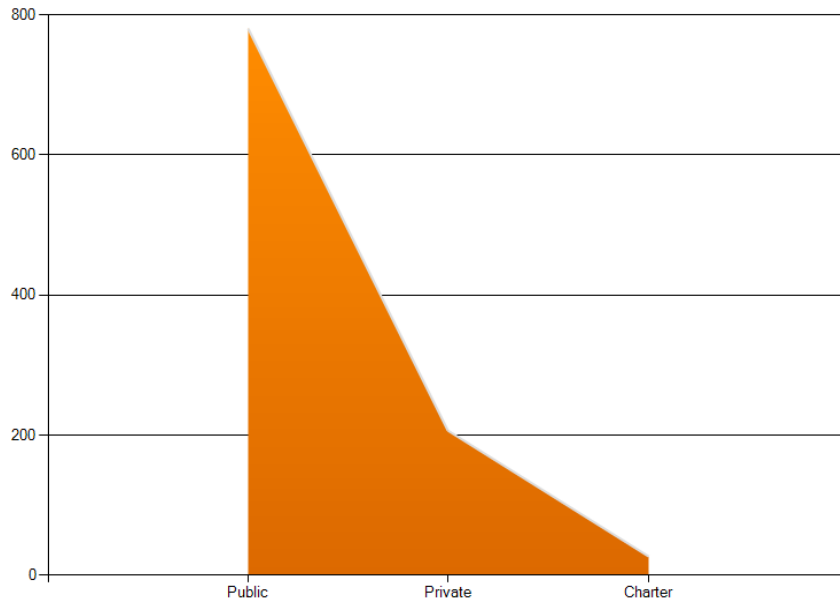

Figure 3. School Setting Distribution

Figure 4. School Type Distribution

Graduation rate results 439 (45.7%) schools reported 98% to100%, 204 (21.2%) schools reported 95% to 97%, 150 (15.6%) schools reported 90% to 94%, 77 (8.0%) schools reported 85% to 89%, 43 (4.5%) schools reported 80% to 84%, 28 (2.9%) schools reported 75% to 79%, and 20 (2.1%) schools reported graduation rates between 0% to 74%. Dropout rate results 580 (60.4%) school reported 0% to 2%, 215 (22.4%) schools reported 3% to 5%, 89 (9.3%) schools reported 6% to 9%, 44 (4.6%) schools reported 10% to 14%, 21 (2.2%) schools reported 15% to 19%, 6 (0.6%) schools reported 20% to 24%, and 6 (0.6%) schools reported dropout rates between 25% to 100%. ADA rate results 113 (11.8%) schools reported 98% to100%, 392 (40.8%) schools reported 95% to 97%, 334 (34.8%) schools reported 90% to 94%, 80 (8.3%) schools reported 85% to 89%, 30 (3.1%) schools reported 80% to 84%, 9 (0.9%) schools reported 75% to 79%, and 3 (0.3%) schools reported graduation rates between 0% to 74%. For average letter grades, the average female student scored 2.98 (SD = .472) while the average male

student scored 2.75 (*SD* = .603). Overall the average letter grade or grade point average

for students was 2.86 (*SD* = .4819). 635 (66.1%) of school indicated having a budget

reduction the last four years while 326 (33.9%) schools indicate no budget reduction.
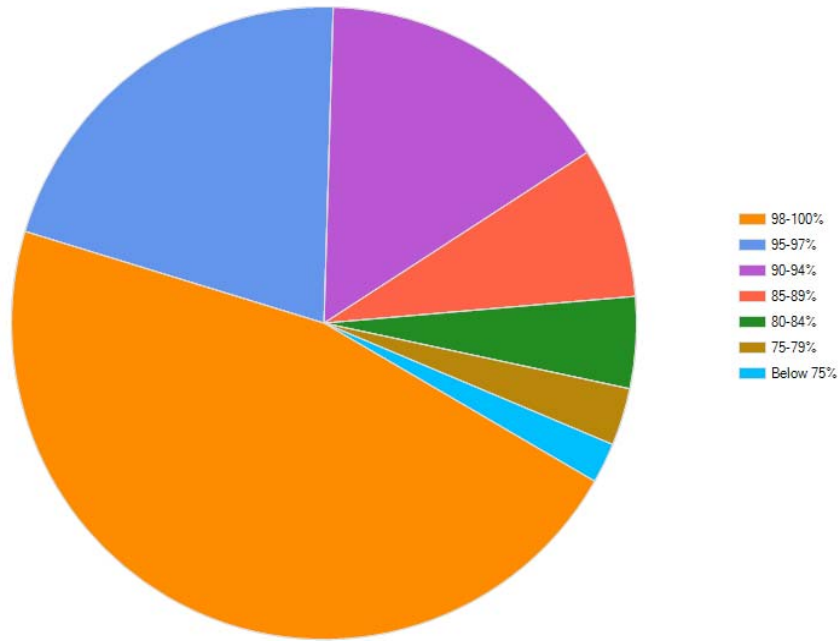

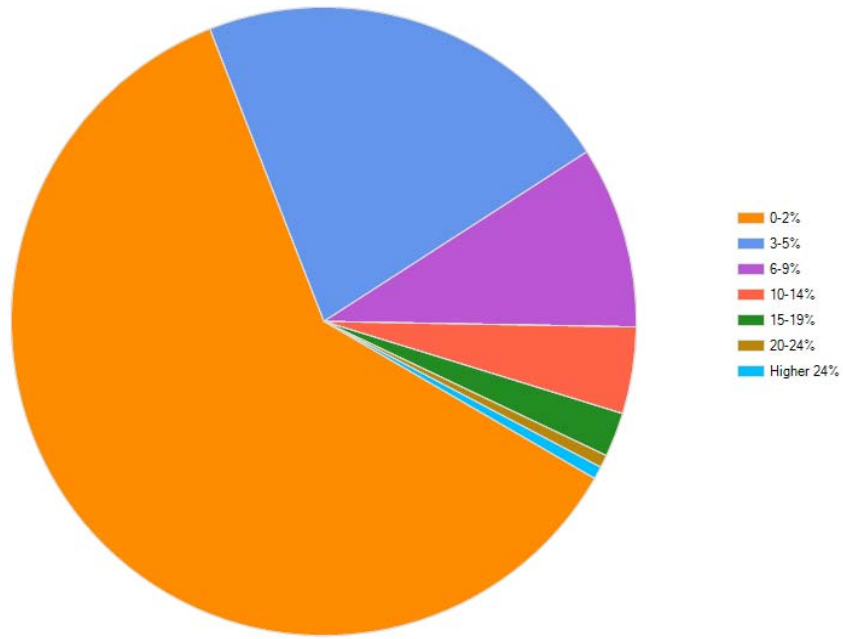
Figure 5. Graduation Rate Distribution
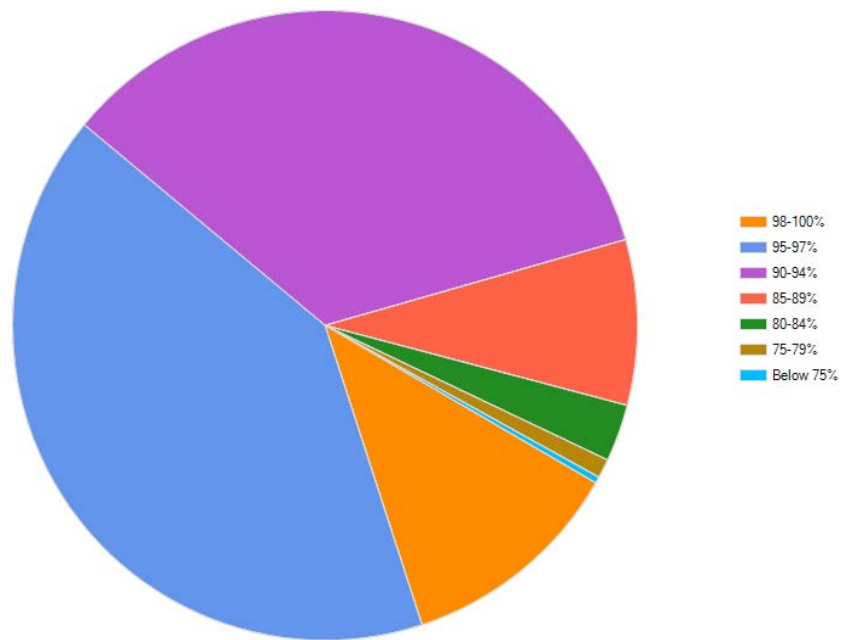
Figure 6. Dropout Rate Distribution

Figure 7. Average Daily Attendance Distribution

Table 2. Female Average Letter Grade Distribution

	Frequency	Percent	Cumulative Percent
2	117	12.2	12.2
3	747	77.7	89.9
4	97	10.1	100.0
Total	961	100.0	

Table 3. Male Average Letter Grade Distribution

	Frequency	Percent	Cumulative Percent
0	5	.5	.5
1	6	.6	1.1
2	280	29.1	30.3
3	608	63.3	93.5
4	62	6.5	100.0
Total	961	100.0	

Table 4. Average Overall Letter Grade Distribution

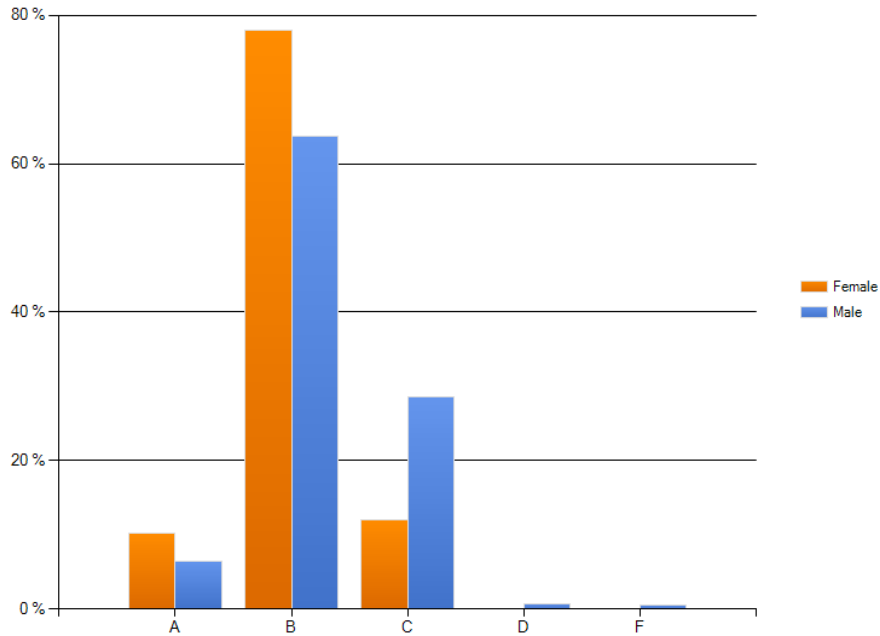|	Frequency	Percent	Cumulative Percent
1.5	9	.9	.9
2.0	108	11.2	12.2
2.5	177	18.4	30.6
3.0	572	59.5	90.1
3.5	35	3.6	93.8
4.0	60	6.2	100.0
Total	961	100.0	

Figure 8. Average Male & Female Letter Grades Distribution

Table 5. Budget Reduction Distribution

	Frequency	Percent	Cumulative Percent
Yes	635	66.1	66.1
No	326	33.9	100.0
Total	961	100.0	

Hypothesis 1

To determine the significance of the correlation between athletic involvement and academic success, the following hypothesis was tested:

H_1: There is a statistical significant correlation between high schools with greater athletic involvement and higher cumulative letter grade averages for high school students.

13

H_0: There is no statistical significant correlation between high schools with greater athletic involvement and higher cumulative letter grade averages for high school students.

To examine the correlation between athletic involvement and letter grade averages a multiple correlation analysis was conducted. 961 high schools from the 2011-2012 school year were investigated. For the 961 high schools, the mean of athletic involvement was 51.11 with a standard deviation of 18.815. Non-athletes involvement scored a mean of 48.89 with a standard deviation of 18.815. Female average letter grades were 2.75 with a standard deviation of .472, male average letter grade were 2.75 with a standard deviation of .603, and the average mean for both male as well as female was 2.862 with a standard deviation of .4819. The means and standard deviations are presented in Table 6.

Table 6. Involvement and Average Letter Grade Descriptive Statistics

	Mean	Std. Deviation	N
Athlete Involvement %	51.11	18.815	961
Non-Athlete Involvement %	48.89	18.815	961
Female Average Letter Grade	2.98	.472	961
Male Average Letter Grade	2.75	.603	961
Overall Average Letter Grade	2.862	.4819	961

After viewing the results of the statistical test for athletic involvement and female average letter grade, it was concluded that a significant positive correlation existed at r (961) = .314, p = .000. Next, the correlation between non-athlete involvement and female average letter grade concluded there was a significant negative correlation existed at r

14

(961) = -.314, p = .000. Furthermore, the correlation between athletic involvement and

male average letter grade, it was concluded that a significant positive correlation existed

at r (961) = .319, p = .000. Also a significant negative correlation existed between non-

athlete involvement and male average letter grade r (961) = -.314, p = .000). Moreover,

the correlation for athletic involvement and overall average letter grade indicated a

significant positive correlation at r (961) = .353, p = .000. Lastly, non-athlete

involvement and overall average letter grade showed a significant negative correlation r

(961) = -.353, p = .000). ANOVA Test showed the same results with a statistically

significance value of .000 and degree of freedom at 955. These conclusions are identified

in Table 7 and 8.

Table 7. Involvement and Average Letter Grade Pearsons Test

		Athlete Involvement %	Non-Athlete Involvement %	Female Average Letter Grade	Male Average Letter Grade	Overall Average Letter Grade
Athlete Involvement %	Pearson Correlation	1	-1.000**	.314**	.319**	.353**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	961	961	961	961	961
Non-Athlete Involvement %	Pearson Correlation	-1.000**	1	-.314**	-.319**	-.353**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	961	961	961	961	961
Female Average Letter Grade	Pearson Correlation	.314**	-.314**	1	.604**	.867**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	961	961	961	961	961
Male Average Letter Grade	Pearson Correlation	.319**	-.319**	.604**	1	.921**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	961	961	961	961	961
Overall Average Letter Grade	Pearson Correlation	.353**	-.353**	.867**	.921**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	961	961	961	961	961

**. Correlation is significant at the 0.01 level (2-tailed).

Table 8. Involvement and Average Letter Grade ANOVA Test & Plots

		Sum of Squares	df	Mean Square	F	Sig.
Athlete Involvement %	Between Groups	45305.100	5	9061.020	29.379	.000
	Within Groups	294537.536	955	308.416		
	Total	339842.637	960			
Non-Athlete Involvement %	Between Groups	45305.100	5	9061.020	29.379	.000
	Within Groups	294537.536	955	308.416		
	Total	339842.637	960			

A final analysis was completed by the researcher filtering the data results to identify high schools with less than 50% athletic involvement ($N = 497$) and high schools with greater than 50% athletic involvement ($N = 442$). This analysis excluded high schools with evenly distributed athletic involvement at 50% for both athletes and non-athlete respectively ($N = 22$) since these schools would be represented under both data Tables. Table 9 presents the average letter grades for students whose schools had less than 50% athletic involvement while Table 10 shows the average letter grades for students whose schools had greater than 50% athletic involvement.

Both Tables 9 and 10 results were assigned numerical point values of 4 to A, 3 to B, 2 to C, 1 to D, and 0 to F. The researcher then added the total numerical point values and divided by the number of responses for the grade. For example, Table 9 value of respondents for "C = 2" was calculated 95 (Female) plus (+) 205 (Male) equals 300 times 2 (For the point value of C) equals 600 point value. The letter "A = 4" total point value was 164, letter "B = 3" total point value was 1935, letter "C = 2" total point value was 600, letter "D = 1" total point value was 6, and letter "F = 0" total point value was 0, equaling 2705 (164 + 1935 + 600 + 6 + 0 = 2705). 2705 was divided by the total number

of responses (994) to calculate the GPA of 2.72 for high schools with less than 50%

athletic involvement. High schools with greater than 50% athletic involvement calculated

a higher GPA of 3.01 using the same procedure. These conclusions are identified in Table

9 and 10.

Table 9. Average Letter Grade with Less than 50% Athletic Involvement

Answer	A=4	B=3	C=2	D=1	F=0	Response Count
Female	25	377	95	0	0	497
Male	16	268	205	6	2	497
Overall GPA Value	164	1935	600	6	0	2.72

Table 10. Average Letter Grade with Greater than 50% Athletic Involvement

Answer	A	B	C	D	F	Response Count
Female	69	353	20	0	0	442
Male	44	324	71	0	3	442
Overall GPA Value	452	2031	182	0	0	3.01

As a result of these findings, the null hypothesis was rejected; there is a statistical

significant correlation between high schools with greater athletic involvement and higher

cumulative letter grade averages for high school students.

Hypothesis 2

To determine the significance of the correlation between athletic involvement and

academic success, the following hypothesis was tested:

H_2: There is a greater statistical significant correlation between high schools with

greater athletic involvement and higher high school average daily attendance.

H_0: There is not a greater statistical significant correlation between high schools

with greater athletic involvement and higher high school average daily

attendance.

To examine the correlation between athletic involvement and letter grade averages a multiple correlation analysis was conducted. 961 high schools from the 2011-2012 school year were investigated. For the 951 high schools, the mean of athletic involvement was 51.11 with a standard deviation of 18.815. Non-athletes involvement scored a mean of 48.89 with a standard deviation of 18.815. The coded numerical values for average daily attendance scored a mean of 2.54 with a standard deviation of 1.0006. The means and standard deviations are presented in Table 11.

Table 11. Involvement and Average Daily Attendance Descriptive Statistics

	N	Mean	Std. Deviation
Athlete Involvement %	961	51.11	18.815
Non-Athlete Involvement %	961	48.89	18.815
ADA %	961	2.54	1.006

After viewing the results of the statistical test for athletic involvement and average daily attendance, it was concluded that a significant positive correlation existed at r (961) = .320, p = .000. Next, the correlation between non-athlete involvement and average daily attendance concluded there was a significant negative correlation existed at r (961) = -.320, p = .000. For Pearsons Test, a score of 0.00 detects no correlation between variables while a score of 1.00 represents an identical correlation. Both sets of data indicated a significant correlation either positive or negatively toward average daily attendance rates. ANOVA Test showed the same supporting results with a statistically significance value of .000 and degree of freedom at 954. These conclusions are identified in Table 12 and 13.

Table 12. Involvement and Average Daily Attendance Pearsons Test

		Athlete Involvement %	Non-Athlete Involvement %	ADA %
Athlete Involvement %	Pearson Correlation	1	-1.000**	.320**
	Sig. (2-tailed)		.000	.000
	N	961	961	961
Non-Athlete Involvement %	Pearson Correlation	-1.000**	1	-.320**
	Sig. (2-tailed)	.000		.000
	N	961	961	961
ADA %	Pearson Correlation	.320**	-.320**	1
	Sig. (2-tailed)	.000	.000	
	N	961	961	961

**. Correlation is significant at the 0.01 level (2-tailed).

Table 13. Involvement and ADA ANOVA Test & Plots

		Sum of Squares	df	Mean Square	F	Sig.
Athlete Involvement %	Between Groups	36100.291	6	6016.715	18.897	.000
	Within Groups	303742.345	954	318.388		
	Total	339842.637	960			
Non-Athlete Involvement %	Between Groups	36100.291	6	6016.715	18.897	.000
	Within Groups	303742.345	954	318.388		
	Total	339842.637	960			

A final analysis was completed by the researcher filtering the data results to identify high schools with less than 50% athletic involvement ($N = 497$) and high schools with greater than 50% athletic involvement ($N = 442$). This analysis excluded high schools with evenly distributed athletic involvement at 50% for both athletes and non-athlete respectively ($N = 22$) since these schools would be represented under both data Tables. Table 14 presents the average daily attendance for students whose schools had

less than 50% athletic involvement while Table 15 shows the average daily attendance for student whose schools had greater than 50% athletic involvement.

High schools with greater than 50% athletic involvement scored higher ADA rates than schools with less than 50% involvement. Observing the combined upper categories of 98% to 100% and 95% to 97%, 65.6% of high athletic involvement schools scored in these categories compared to 40.6% of schools with less than 50% athletic involvement. These conclusions are identified in Table 14 and 15.

Table 14. ADA with Less than 50% Athletic Involvement

Options	Percent	Count
98-100%	5.8%	29
95-97%	34.8%	173
90-94%	40.4%	201
85-89%	11.9%	59
80-84%	5.0%	25
75-79%	1.4%	7
Below 75%	0.6%	3
	Total Count	497

Table 15. ADA for school with Greater than 50% Athletic Involvement

Options	Percent	Count
98-100%	18.3%	81
95-97%	47.3%	209
90-94%	29.2%	129
85-89%	4.1%	18
80-84%	0.9%	4
75-79%	0.2%	1
Below 75%	0.0%	0
	Total Count	442

20

As a result of these findings, the null hypothesis was rejected; there is a statistical significant correlation between high schools with greater athletic involvement and higher average daily attendance rates for high school students.

Hypothesis 3

To determine the significance of the correlation between athletic involvement and academic success, the following hypothesis was tested:

H_3: There is a greater statistical significant correlation between high schools with greater athletic involvement and lower high school dropout rates.

H_0: There is not a greater statistical significant correlation between high schools with greater athletic involvement and lower high school dropout rates.

To examine the correlation between athletic involvement and dropout rates a multiple correlation analysis was conducted. 961 high schools from the 2011-2012 school year were investigated. For the 951 high schools, the mean of athletic involvement was 51.11 with a standard deviation of 18.815. Non-athletes involvement scored a mean of 48.89 with a standard deviation of 18.815. The coded numerical values for dropout rates scored a mean of 6.30 with a standard deviation of 1.116. The means and standard deviations are presented in Table 16.

Table 16. Involvement and Dropout Rates Descriptive Statistics

	Mean	Std. Deviation	N
Athlete Involvement %	51.11	18.815	961
Non-Athlete Involvement %	48.89	18.815	961
Dropout Rate%	6.30	1.116	961

After viewing the results of the statistical test for athletic involvement and dropout rates, it was concluded that a significant positive (lower) correlation existed at r (961) = .371, p = .000. Next, the correlation between non-athlete involvement and dropout rates concluded there was a significant negative (higher) correlation existed at r (961) = -.371, p = .000. For Pearsons Test, a score of 0.00 detects no correlation between variables while a score of 1.00 represents an identical correlation. Both sets of data indicated a significant correlation either positive or negatively toward dropout rates. ANOVA Test showed the same supporting results with a statistically significance value of .000 and degree of freedom at 954. These conclusions are identified in Table 17 and 18.

Table 17. Involvement and Dropout Rates Pearsons Test

		Athlete Involvement %	Non-Athlete Involvement %	Dropout Rate%
Athlete Involvement %	Pearson Correlation	1	-1.000**	.371**
	Sig. (2-tailed)		.000	.000
	N	961	961	961
Non-Athlete Involvement %	Pearson Correlation	-1.000**	1	-.371**
	Sig. (2-tailed)	.000		.000
	N	961	961	961
Dropout Rate%	Pearson Correlation	.371**	-.371**	1
	Sig. (2-tailed)	.000	.000	
	N	961	961	961

**. Correlation is significant at the 0.01 level (2-tailed).

Table 18. Involvement and Dropout Rates ANOVA Test & Plots

		Sum of Squares	df	Mean Square	F	Sig.
Athlete Involvement %	Between Groups	59615.511	6	9935.918	33.826	.000
	Within Groups	280227.126	954	293.739		
	Total	339842.637	960			
Non-Athlete Involvement %	Between Groups	59615.511	6	9935.918	33.826	.000
	Within Groups	280227.126	954	293.739		
	Total	339842.637	960			

A final analysis was completed by the researcher filtering the data results to identify high schools with less than 50% athletic involvement ($N = 497$) and high schools with greater than 50% athletic involvement ($N = 442$). This analysis excluded high schools with evenly distributed athletic involvement at 50% for both athletes and non-athlete respectively ($N = 22$) since these schools would be represented under both data Tables. Table 19 presents the dropout rates for students whose schools had less than 50% athletic involvement while Table 20 shows the dropout rates for student whose schools had greater than 50% athletic involvement.

High schools with greater than 50% athletic involvement scored lower dropout rates than schools with less than 50% involvement. Observing the combined upper categories of 0% to 2% and 3% to 5%, 93.4% of high athletic involvement schools scored in these categories compared to 73.1% of schools with less than 50% athletic involvement. These conclusions are identified in Table 19 and 20.

Table 19. Dropout Rates with Less than 50% Athletic Involvement

Options	Percent	Count
0-2%	43.3%	215
3-5%	29.8%	148
6-9%	13.7%	68
10-14%	7.4%	37
15-19%	4.0%	20
20-24%	0.8%	4
Higher 24%	1.0%	5
	Total Count	497

Table 20. Dropout Rates for school with Greater than 50% Athletic Involvement

Options	Percent	Count
0-2%	79.6%	352
3-5%	13.8%	61
6-9%	4.3%	19
10-14%	1.6%	7
15-19%	0.2%	1
20-24%	0.2%	1
Higher 24%	0.2%	1
	Total Count	442

As a result of these findings, the null hypothesis was rejected; there is a statistical significant correlation between high schools with greater athletic involvement and lower dropout rates for high school students.

Hypothesis 4

To determine the significance of the correlation between athletic involvement and academic success, the following hypothesis was tested:

H_4: There is a greater statistical significant correlation between high schools with greater athletic involvement and higher high school graduation rates.

24

H_0: There is not a greater statistical significant correlation between high schools

with greater athletic involvement and higher high school graduation rates.

To examine the correlation between athletic involvement and graduation rates a

multiple correlation analysis was conducted. 961 high schools from the 2011-2012 school

year were investigated. For the 951 high schools, the mean of athletic involvement was

51.11 with a standard deviation of 18.815. Non-athletes involvement scored a mean of

48.89 with a standard deviation of 18.815. The coded numerical values for graduation

rates scored a mean of 5.79 with a standard deviation of 1.510. The means and standard

deviations are presented in Table 21.

Table 21. Involvement and Graduation Rates Descriptive Statistics

	Mean	Std. Deviation	N
Athlete Involvement %	51.11	18.815	961
Non-Athlete Involvement %	48.89	18.815	961
Graduation Rate %	5.79	1.510	961

After viewing the results of the statistical test for athletic involvement and

graduation rates, it was concluded that a significant positive correlation existed at r (961)

= .428, p = .000. Next, the correlation between non-athlete involvement and graduation

rates concluded there was a significant negative correlation existed at r (961) = -.428, p =

.000. For Pearsons Test, a score of 0.00 detects no correlation between variables while a

score of 1.00 represents an identical correlation. Both sets of data indicated a significant

correlation either positive or negatively toward graduation rates. ANOVA Test showed

the same supporting results with a statistically significance value of .000 and degree of

freedom at 954.These conclusions are identified in Table 22 and 23.

Table 22. Involvement and Graduation Rates Pearsons Test

		Athlete Involvement %	Non-Athlete Involvement %	Graduation Rate %
Athlete Involvement %	Pearson Correlation	1	-1.000**	.428**
	Sig. (2-tailed)		.000	.000
	N	961	961	961
Non-Athlete Involvement %	Pearson Correlation	-1.000**	1	-.428**
	Sig. (2-tailed)	.000		.000
	N	961	961	961
Graduation Rate %	Pearson Correlation	.428**	-.428**	1
	Sig. (2-tailed)	.000	.000	
	N	961	961	961

**. Correlation is significant at the 0.01 level (2-tailed).

Table 23. Involvement and Graduation Rates ANOVA Test & Plots

		Sum of Squares	df	Mean Square	F	Sig.
Athlete Involvement %	Between Groups	76463.655	6	12743.943	46.161	.000
	Within Groups	263378.981	954	276.079		
	Total	339842.637	960			
Non-Athlete Involvement %	Between Groups	76463.655	6	12743.943	46.161	.000
	Within Groups	263378.981	954	276.079		
	Total	339842.637	960			

A final analysis was completed by the researcher filtering the data results to identify high schools with less than 50% athletic involvement ($N = 497$) and high schools with greater than 50% athletic involvement ($N = 442$). This analysis excluded high schools with evenly distributed athletic involvement at 50% for both athletes and non-athlete respectively ($N = 22$) since these schools would be represented under both data Tables. Table 24 presents the graduation rates for students whose schools had less than 50% athletic involvement while Table 25 shows the graduation rates for student whose schools had greater than 50% athletic involvement.

High schools with greater than 50% athletic involvement had higher graduation rates than schools with less than 50% involvement. Observing the combined upper categories of 98% to 100% and 95% to 97%, 84.6% of high athletic involvement schools scored in these categories compared to 51.3% of schools with less than 50% athletic involvement. These conclusions are identified in Table 24 and 25.

Table 24. Graduation Rates with Less than 50% Athletic Involvement

Options	Response Percent	Response Count
98-100%	27.4%	136
95-97%	23.9%	119
90-94%	22.7%	113
85-89%	11.9%	59
80-84%	6.2%	31
75-79%	4.6%	23
Below 75%	3.2%	16
	answered question	497

Table 25. Graduation Rates for school with Greater than 50% Athletic Involvement

Options	Percent	Count
98-100%	66.7%	295
95-97%	17.9%	79
90-94%	7.0%	31
85-89%	4.1%	18
80-84%	2.5%	11
75-79%	1.1%	5
Below 75%	0.7%	3
	Total Count	442

As a result of these findings, the null hypothesis was rejected; there is a statistical significant correlation between high schools with greater athletic involvement and higher graduation rates for high school students.

Summary

The purpose of this study was to examine the correlation between athletic involvement and academic success in high school students during the 2011-12 school year. The four hypotheses were tested utilizing Pearson Correlation Test as well as analyzing schools with more athletic involvement compared to schools with less athletic involvement for identifying a significant correlation. As a result of this study, the Pearson Correlation Test found a significant correlation in schools reporting graduation rates (+/- .428), dropout rates (+/- .371), average daily attendance (+/- .320), and average letter grades (+/- .353) as each correlates with athletic involvement.

The remainder of this study will summarize results, articulate conclusions, and make recommendations on future research.

REFERENCES FOR CONDUCTING STUDY

Alliance For Excellent Education (2013). *High school state cards.* Retrieved from http://www.all4ed.org/about_the_crisis/schools/state_cards

Berry, J. (2005). *Quantitative methods in education research.* Retrieved from http://www.edu.plymouth.ac.uk/resined/Quantitative/quanthme.htm

Blackwell, J. (2006). *Empowering school leaders: Personal political power for school board members and administrators*. Lanham, MD: Rowman & Littlefield Education.

Branch, J. L. (2003). *Extracurricular activities and academic achievement* (Doctoral dissertation, University of Southern Mississippi). Retrieved from ProQuest Dissertations and Theses.

Brigham, E. F. & Ehrhardt, M. C. (2010). *Financial management: theory & practice (12th ed.).* Mason, OH: Cengage South-Western.

Broh, B. A. (2002). Linking extracurricular programming to academic achievement: Who benefits and why? *Sociology of Education*, 75, 69-91.

Butterfield, S.A. & Brown, B.R. (1991). Student-athlete perceptions of high school sports participation. *The Physical Educator*, 48, 3, 123-128.

Calabrese, R. L. (2002). *The leadership assignment: Creating change.* Boston, MA: Pearson Education.

Capella University. (2010). Weekend experience: Track one. Minneapolis, MN: Capella University. "*Weekend experience: Track one*"

Capella University. (2011). Weekend experience: Track two. Minneapolis, MN: Capella University. "*Weekend experience: Track two*"

Cook, G. (2003). Win at all costs. *American school board journal*, 190(8), 12-16.

Corbett, M. (2007). *To participate or not participate: The relationship between school sponsored extracurricular activity participation and student outcomes* (Doctoral dissertation, Rutgers, The State University of New Jersey). Retrieved from ProQuest Dissertations and Theses.

Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research.* Upper Saddle River, NJ; Merrill Prentice Hall.

Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research.* (3rd ed.). Upper Saddle River: Pearson Education.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage.

Dufour, R., Dufour, R., Eaker, R., & Many, T. (2005). *Learning by doing: A handbook for professional learning communities at work*. Bloomington, IL: Solution Tree.

Education Data Express. (2013). Appendix B of regulatory adjusted cohort graduation rate, all students: 2010-11. Retrieved from http://eddataexpress.ed.gov/data-element-explorer.cfm/tab/data/deid/127/

ED.gov. (2010). National education technology plan 2010. Retrieved from http://www.ed.gov/technology/netp-2010

Ellis, T. J., & Levy, Y. (2008). Framework of problem-based research: A guide for novice researchers on the development of a research-worthy problem. *Informing science*, 11, 17-33.

Fejgin, N. (1994). Participation in high school competitive sports: A subversion of school mission or contribution to academic goals? *Sociology of sport journal* 11, 211-230.

Feldman, A. F., & Matjasko, J. L. (2005). The role of school-based extracurricular activities in adolescent development: A comprehensive review and future directions. *Review of educational research*, 75, 159-210.

Fowler, F. J. (2002). *Survey research methods* (3rd ed.). Thousand Oaks, CA: Sage.

Gehring, J. (2001). Panel criticizes college, high school sports. *Education week*, 20(42) 16.

Gorton, R. A., & Alston, J. A. (2009). *School leadership and administration: Important concepts, case studies & simulations* (8th ed.). New York, NY: McGraw-Hill.

Hicks, C. R., & Turner, K. V. (1999). *Fundamental concepts in the design of experiments.* New York, NY: Oxford University.

Hopkins, W. G. (2000). Quantitative research design. Retrieved from http://www.sportsci.org/jour/0001/wghdesign.html.

Jacobs, R. L. (1997). HRD is not the research problem. Human resource development Quarterly, 8(1), 1-4.

JacAngelo, N. P. (2003). *The relation of sports participation to academic performance of high school students* (Doctoral dissertation, Florida International University). Retrieved from ProQuest Dissertations and Theses.

Jejunum. (2003). *Merriam-Webster's dictionary* (11th ed.). Springfield, MA: Merriam-Webster.

Kaufmann, A. M. (2002). *Interscholastic sports participation as a predictor of academic success for high school students* (Doctoral dissertation, University of Wisconsin). Retrieved from ProQuest Dissertations and Theses

Kerlinger, F. N., & Lee, H. B. (2000). *Foundations of behavioral research* (4th ed.). Holt, NY: Harcourt College.

Kotter, J. (2008). *A sense of urgency*. Boston, MA: Harvard Business School.

Kuby, J. (2011). *Elementary statistics* (11th ed.). Boston, MA: Brooks and Cole.

Levine, A. (2005). *Educating school leaders.* New York, NY: The education school project.

Los Angeles Unified School District (2012). *Data linking participation in athletics to academic success*. Retrieved from http://www.cif-la.org/apps/news/show_news.jsp?REC_ID=258604&id=0

Lumpkin, A., & Favor, J. (2012) Comparing the academic performance of high school athletes and non-Athletes in Kansas in 2008-2009. *Journal of sport administration & supervision 4*(1), 41-62.

Lunenburg, F. C. & Ornstein, A. C. (2012). *Educational administration: Concepts and practices* (6th ed.). Belmont, CA; Wadsworth.

Marsh, H. W. (1992). Extracurricular activities: Beneficial extension of the traditional curriculum or subversion of academic goals? *Journal of educational psychology, 84,*553-562.

National Association of State Boards of Education. (2004). *Athletics and achievement: The report of the NASBE commission on high school athletics in an era of reform.* Alexandria, VA: Author.

National Center for Education Statistics. (2011). *Extracurricular activities of high school students*. Retrieved from http://nces.ed.gov/programs/coe/indicator_exa.asp

National Center for Education Statistics. (2012). *Elementary and secondary education.* Retrieved from http://nces.ed.gov/pubs2012/2012001_2a.pdf

National Center for Education Statistics. (2013a). Public school graduates and dropouts from the common core of data: School year 2008–09. Retrieved from http://nces.ed.gov/pubs2011/2011312.pdf

National Center for Education Statistics. (2013b). Institute of education sciences. Retrieved from http://nces.ed.gov/nationsreportcard/statecomparisons/

National Center for Education Statistics. (2013c). *Public school graduates and dropouts from the common core of data: School year 2008–09.* Retrieved from http://nces.ed.gov/pubs2011/2011312.pdf

National Center for Educational Statistics. (2013d). Appendix F of state diploma recipients/completers 2009-09. Retrieved from http://nces.ed.gov/ccd/elsi/

National Center for Educational Statistics Fast Facts. (2013). *Fast facts: Dropout rates.* Retrieved from http://nces.ed.gov/fastfacts/display.asp?id=16

National Education Association. (2013a). *Rankings & estimates.* Retrieved from http://www.nea.org/assets/docs/NEA_Rankings_And_Estimates_FINAL_20120209.pdf

National Education Association. (2013b). *Rankings & estimates.* Retrieved from http://www.nea.org/assets/docs/NEA_Rankings_And_Estimates_FINAL_20120209.pdf

National Federation of State High School Associations. (2008). *The case for high school activities.* Retrieved from http://www.nfhs.org/content.aspx?id=3262

Neish, M. A. (1993). Student activities and academic achievement at marysville high school. Reston, VA: National Association of Student Activity Advisers.

Nunamaker, J. F., Chen, M., & Purdin, T. D. M. (1991). Systems development in information systems research. *Journal of Management Information Systems*, 7(3), 89-106.

Owens, R. G. & Valesky, T. C. (2007). *Organizational behavior in education: Adaptive leadership and school reform.* (9th ed.). Boston, MA: Pearson Education.

Pittman, A., Spengler, J., & Young, S (2008). *Case studies in sports law.* Champaign: Human Kinetics.

Robbins, P. M., & Alvy, H. B. (2009). *The principal's companion* (3rd ed.). Thousand
  Oaks, CA: Corwin.

Rose, L. C., Gallup, A. M., & Elam, S. M. (1997). The 29th annual phi delta
  kappa/gallup poll of the public's attitudes toward the public schools. *phi delta
  kappan, 79(1),* 41-56.

Salkind, N. J. (2008). *Statistics for people who (think they) hate statistics* (3rd ed.).
  Thousand Oaks, CA: Sage.

Senge, P. M. (2006). *The fifth discipline: The art & practice of learning organization* (2nd
  ed.). New York, NY: Random House.

Sproull, N. L. (2002). *Handbook of research methods: A guide for practitioners and
  students in the social sciences.* Lanham, MD [u.a.]: Scarecrow.

Sunal, C.S. & Mutua. K. (2007). *The enterprise of education in africa, the caribbean, and
  the middle east: Reports from the field.* (pp. 1-6).Charlotte, NC: Information Age.

Trochim, W. (2006). Social research methods knowledge base/variables. Retrieved from
  http://www.socialresearchmethods.net/kb/variable.php

United States Department of Education. (2013). *States report new high school
  graduation rates using more accurate, common measure.* Retrieved from
  http://www.ed.gov/news/press-releases/states-report-new-high-school-graduation-
  rates-using-more-accurate-common-measur

VanDuyne, D. W. (2004). *The effects of extracurricular engagement on students'
  academic achievement* (Doctoral dissertation, Purdue University). Retrieved from
  ProQuest Dissertations and Theses.

Walonick, D.S. (1993). *Organizational theory and behavior.* Retrieved from
  http://www.survey-software-solutions.com/walonick/organizationaltheory.htm

Wilmore, E. L. (2002). *Principal leadership: applying the new educational leadership
  constituent council (ELCC) standards.* Thousand Oaks, CA: Corwin.

Wilson, D. S. (2011). To play or not to play: A study of athletic participation and its
  effect on academic performance. Retrieved from ProQuest Digital Dissertations
  database.

Young, M. D. (2002, February). *Ensuring the university's capacity to prepare learning-
  focused leadership.* Report presented at the meeting of the national commission
  for the advancement of educational leadership, Racine, WI.

Appendix A

Athletic Involvement and Academic Success Survey

Please complete the following twelve (12) survey questions regarding your school in 2011-2012. All results are anonymous and will be reported as group data. If you would like results of this research contact: mblackburn@niaaa.org.

PLEASE NOTE: Overall student GRADUATION RATE, DROPOUT RATE, AVERAGE DAILY ATTENDANCE, and average graduating LETTER GRADE for male and female student population are required to complete this survey. Please consult your district office to answer each question to the best of your ability.

View Research Informed Consent @ http://tinyurl.com/InformedConsent2013

By clicking "Next" below you agree to the following statement: I have read the informed consent, and I have been able to ask questions about this study. The researcher has answered all my questions. I voluntarily agree to be in this study. I agree to allow the use and sharing of my study-related records as described. I have not given up any of my legal rights as a research participant. I will print a copy of this consent information for my records.

Athletic Involvement and Academic Success Survey

Please complete the following twelve (12) survey questions regarding your school in 2011-2012. All results are anonymous and will be reported as group data. If you would like results of this research contact: mblackburn@niaaa.org.

PLEASE NOTE: Overall student GRADUATION RATE, DROPOUT RATE, AVERAGE DAILY ATTENDANCE, and average graduating LETTER GRADE for male and female student population are required to complete this survey. Please consult your district office to answer each question to the best of your ability.

* 1. In which state is your school located?

State: ⬚

* 2. Grade Level

◯ 6-12

◯ 7-12

◯ 9-12

◯ 10-12

* 3. School enrollment (2011-12)

◯ 0-499

◯ 500-999

◯ 1000-1499

◯ 1500-1999

◯ 2000+

*4. Best describes school setting

◯ Urban Community

◯ Suburban Community

◯ Rural Community

*5. Best describes school type

◯ Public

◯ Private

◯ Charter

*6. Gender distribution within your school student population (2011-12)

Female % [   ]

Male % [   ]

*7. Athletic participation distribution within your school student population (2011-12)

Athletes % [   ]

Non-Athletes % [   ]

Athletic Involvement and Academic Success Survey

Below are questions regarding your student population's graduation rate, dropout rate, average daily attendance (ADA), and grade point average. Please answer the following questions as honestly as you can. Contact your district office when necessary.

*8. What is the average GRADUATION RATE for your overall student population in 2011-12?

◯ 98-100%   ◯ 95-97%   ◯ 90-94%   ◯ 85-89%   ◯ 80-84%   ◯ 75-79%   ◯ Below 75%

*9. What is the average DROPOUT RATE for your overall student population in 2011-12?

◯ 0-2%   ◯ 3-5%   ◯ 6-9%   ◯ 10-14%   ◯ 15-19%   ◯ 20-24%   ◯ Higher 24%

*10. What is the AVERAGE DAILY ATTENDANCE (ADA) RATE for your overall student population in 2011-12?

◯ 98-100%   ◯ 95-97%   ◯ 90-94%   ◯ 85-89%   ◯ 80-84%   ◯ 75-79%   ◯ Below 75%

Note: The above ADA should be calculated by dividing the total number of days of student attendance by the number of days of school taught during the same period.

For Example:

Tu has perfect attendance, calculated this way:
142 days attended ÷ by 142 days of school taught = 1.0 ADA or 100%

Jewels attended 136 of the 142 days taught, calculated this way:
136 days attended ÷ by 142 days of school taught = .96 ADA or 96%

*11. What is the average GRADE for your overall student population in 2011-12?

	A	B	C	D	F
Female	◯	◯	◯	◯	◯
Male	◯	◯	◯	◯	◯

*12. During the last four (4) years has your school's athletic program suffered budgetary reduction?

◯ Yes, we had reductions

◯ No, reductions

ADJUSTED COHORT GRADUATION RATE, ALL STUDENTS: 2010-11

Appendix B

State	Value	0--------------------------------50%--------------------------------100%
National	-	
Alabama	72%	
Alaska	68%	
Arizona	78%	
Arkansas	81%	
California	76%	
Colorado	74%	
Connecticut	83%	
Delaware	78%	
District of Columbia	59%	
Florida	71%	
Georgia	67%	
Hawaii	80%	
Idaho	†	
Illinois	84%	
Indiana	86%	
Iowa	88%	
Kansas	83%	
Kentucky	†	
Louisiana	71%	
Maine	84%	
Maryland	83%	
Massachusetts	83%	
Michigan	74%	

State	Percentage	
Minnesota	77%	
Mississippi	75%	
Missouri	81%	
Montana	82%	
Nebraska	86%	
Nevada	62%	
New Hampshire	86%	
New Jersey	83%	
New Mexico	63%	
New York	77%	
North Carolina	78%	
North Dakota	86%	
Ohio	80%	
Oklahoma	-	
Oregon	68%	
Pennsylvania	83%	
Puerto Rico	†	
Rhode Island	77%	
South Carolina	74%	
South Dakota	83%	
Tennessee	86%	
Texas	86%	
Utah	76%	
Vermont	87%	
Virginia	82%	
Washington	76%	
West Virginia	76%	
Wisconsin	87%	

Wyoming	80%	

Key	
†	this symbol means not applicable.
-	this symbol means data value was not available.
n<	this symbol means that the data have been suppressed.
#	this symbol means data value rounds to zero.
‡	this symbol means reporting standards not met.
<3%	this symbol means data value was less than 3%.
>97%	this symbol means data value was greater than 97%.

Inserted from <http://eddataexpress.ed.gov/data-element-explorer.cfm/tab/data/deid/127/>

Appendix C

Table 4. Public high school number of dropouts, event dropout rate, and enrollment for grades 9–12, by state or jurisdiction: School year 2008–09

State or jurisdiction	Number of dropouts[1]	Dropout rate[1,2]	Enrollment grades 9–12[2]
Total[3]	607,789	4.1	14,954,795
Alabama	3,292	1.5	217,590
Alaska	2,904	7.0	41,399
Arizona	26,173	8.3	316,122
Arkansas	5,641	4.1	137,358
California	101,188 [4]	5.0 [4]	2,013,687
Colorado	14,571	6.1	238,139
Connecticut	5,392	3.1	174,980
Delaware	1,987	5.1	38,619
District of Columbia	1,246	7.0	17,898
Florida	20,609	2.6	781,725
Georgia	19,942	4.2	470,108
Hawaii	2,598	4.9	53,535
Idaho	1,338	1.6	81,497
Illinois	73,480	11.5	640,512
Indiana	5,429	1.7	316,126
Iowa	4,782	3.1	151,993
Kansas	2,895	2.1	140,032
Kentucky	5,673	2.9	197,825
Louisiana	12,282	6.8	180,660
Maine	2,264	3.6	63,611
Maryland	7,929	3.0	267,388
Massachusetts	8,585	2.9	292,593
Michigan	20,714	3.8	541,231
Minnesota	5,177	1.9	275,864
Mississippi	5,835	4.2	139,135
Missouri	12,221	4.3	282,460
Montana	2,272	5.0	45,030
Nebraska	2,178	2.4	89,678
Nevada	6,341 [4]	5.1 [4]	125,117
New Hampshire	1,126	1.7	64,939
New Jersey	6,926	1.6	425,555
New Mexico	4,804	4.9	98,830
New York	36,790	4.2	875,179
North Carolina	22,966	5.3	429,719
North Dakota	757	2.5	30,773
Ohio	24,109	4.2	577,669
Oklahoma	4,462	2.5	177,132
Oregon	6,132	3.4	179,972
Pennsylvania	13,519	2.3	580,304
Rhode Island	2,086	4.4	47,359
South Carolina	7,074	3.4	210,511
South Dakota	683	1.8	38,952
Tennessee	9,086	3.2	287,401
Texas	41,393	3.2	1,305,637
Utah	5,050	3.3	155,309
Vermont	784	2.6	30,631
Virginia	9,452	2.5	380,787
Washington	15,509	4.7	332,224
West Virginia	3,444	4.1	83,252
Wisconsin	6,412	2.3	284,222
Wyoming	287	1.1	26,526

Table 4. Public high school number of dropouts, event dropout rate, and enrollment for grades 9–12, by state or jurisdiction: School year 2008–09—Continued

State or jurisdiction	Number of dropouts[1]	Dropout rate[1,2]	Enrollment grades 9–12[2]
Department of Defense dependents schools, Bureau of Indian Education, and other jurisdictions			
DoDDS: DoDs Overseas[5]	—	—	—
DDESS: DoDs Domestic[5]	—	—	—
Bureau of Indian Education	—	—	—
American Samoa	—	—	—
Guam	—	—	—
Commonwealth of the Northern Marianas Islands	—	—	—
Puerto Rico	—	—	147,957
U.S. Virgin Islands	387	7.4	5,201

— Not available. State or jurisdiction did not report dropout counts or reported counts that did not conform to the Nation Center for Education Statistics (NCES) definition.

[1] Ungraded dropouts are prorated by the National Center for Education Statistics (NCES) into grades 9–12 based on the graded dropout counts to calculate numerators for dropout rates.

[2] Ungraded student enrollments are prorated by NCES into grades 9–12 based on graded enrollments to calculate denominators for dropout rates.

[3] Totals include the 50 states and the District of Columbia.

[4] Due to item non-response, data for California and Nevada were imputed based on prior year reported data.

[5] DoDDS and DDESS are the Department of Defense Overseas Dependent Elementary and Secondary Schools and the Department of Defense Domestic Dependent Elementary and Secondary Schools, respectively.

NOTE: The event dropout rate is defined as the count of dropouts from a given school year divided by the count of student enrollments within the same grade span at the beginning of the same school year.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "NCES Common Core of Data State Dropout and Completion Data File," School Year 2008–09, Version 1a.

Table 5. Public high school numbers of dropouts and event dropout rates for grades 9–12, by grade and state or jurisdiction: School year 2008–09

State or jurisdiction	Grade 9[1]		Grade 10[1]		Grade 11[1]		Grade 12[1]	
	Number of dropouts	Dropout rate	Number of dropouts	Dropout rate	Number of dropouts	Dropout rate	Number of dropouts	Dropout rate
Total[2]	133,456	3.2	132,869	3.5	135,172	3.8	204,022	6.0
Alabama	865	1.3	900	1.6	829	1.7	698	1.5
Alaska	392	3.7	554	5.4	1,032	9.4	926	9.5
Arizona	6,684	8.0	5,082	6.3	5,976	7.9	8,431	11.0
Arkansas	872	2.3	1,330	3.7	1,739	5.2	1,699	5.6
California[3]	13,479	2.5	15,275	3.0	20,057	4.1	52,377	11.0
Colorado	2,584	4.1	2,721	4.5	3,649	6.3	5,617	10.0
Connecticut	1,271	2.7	1,233	2.8	1,413	3.3	1,475	3.6
Delaware	717	6.1	526	5.3	384	4.4	360	4.4
District of Columbia	510	8.1	258	5.9	157	4.2	138	4.0
Florida	5,268	2.4	5,325	2.6	5,133	2.7	4,883	2.9
Georgia	6,499	4.5	5,659	4.6	4,585	4.3	3,199	3.3
Hawaii	561	3.5	748	5.4	645	5.3	644	5.7
Idaho	220	1.0	296	1.4	400	2.0	422	2.2
Illinois	20,908	11.7	17,454	10.4	14,537	9.9	20,581	13.9
Indiana	484	0.6	799	1.0	1,494	1.9	2,652	3.6
Iowa	301	0.8	667	1.7	1,257	3.3	2,557	6.7
Kansas	427	1.1	678	1.9	774	2.3	1,016	3.1
Kentucky	1,222	2.2	1,566	3.0	1,642	3.5	1,243	2.9
Louisiana	4,593	8.2	2,914	6.5	2,461	5.9	2,314	6.1
Maine	140	0.9	268	1.7	507	3.1	1,349	8.7
Maryland	2,394	3.2	2,157	3.2	1,669	2.7	1,709	2.8
Massachusetts	2,185	2.8	2,159	2.9	2,096	2.9	2,145	3.1
Michigan	4,493	3.2	5,494	3.9	4,789	3.8	5,938	4.7
Minnesota	443	0.7	566	0.8	959	1.4	3,209	4.3
Mississippi	1,379	3.4	1,498	4.1	1,285	4.1	1,094	3.9
Missouri	2,816	3.7	2,900	4.0	3,171	4.6	3,334	5.0
Montana	370	3.1	559	4.9	648	5.8	695	6.5
Nebraska	304	1.3	499	2.2	590	2.7	785	3.5
Nevada[3]	1,769	4.2	1,547	4.5	1,046	4.1	1,979	8.5
New Hampshire	19	0.1	82	0.5	254	1.6	771	5.0
New Jersey	1,768	1.6	1,533	1.5	1,491	1.5	1,494	1.5
New Mexico	1,409	4.7	1,547	5.8	1,133	5.1	715	3.6
New York	8,244	3.5	10,535	4.7	7,501	3.9	9,784	5.3
North Carolina	7,311	5.6	6,168	5.5	5,633	5.7	3,854	4.3
North Dakota	78	1.0	186	2.4	210	2.8	283	3.7
Ohio	7,228	4.5	3,915	2.7	4,767	3.4	8,199	6.1
Oklahoma	966	2.0	1,176	2.6	1,261	2.9	1,059	2.7
Oregon	557	1.2	902	2.0	1,602	3.6	3,071	6.7
Pennsylvania	2,403	1.6	3,255	2.2	3,311	2.4	4,409	3.2
Rhode Island	577	4.2	581	4.8	476	4.4	452	4.2
South Carolina	2,072	3.2	1,972	3.6	1,717	3.6	1,313	3.0
South Dakota	97	0.9	194	1.9	176	1.9	216	2.4
Tennessee	1,558	2.0	1,815	2.4	2,437	3.6	3,276	5.0
Texas	7,627	2.0	9,597	2.9	8,016	2.6	16,153	5.8
Utah	262	0.7	687	1.8	1,260	3.2	2,841	7.5
Vermont	95	1.2	181	2.4	252	3.2	256	3.4
Virginia	2,097	2.0	2,173	2.2	2,334	2.6	2,848	3.3
Washington	3,075	3.5	3,115	3.7	4,046	5.0	5,273	6.6
West Virginia	875	3.7	908	4.3	896	4.6	765	4.0
Wisconsin	944	1.3	610	0.9	1,414	2.0	3,444	4.8
Wyoming	44	0.6	105	1.5	61	1.0	77	1.3

42

Table 5.   Public high school numbers of dropouts and event dropout rates for grades 9–12, by grade and state or jurisdiction: School year 2008–09—Continued

State or jurisdiction	Grade 9[1]		Grade 10[1]		Grade 11[1]		Grade 12[1]	
	Number of dropouts	Dropout rate	Number of dropouts	Dropout rate	Number of dropouts	Dropout rate	Number of dropouts	Dropout rate
Department of Defense dependents schools, Bureau of Indian Education, and other jurisdictions								
DoDDS: DoDs Overseas[4]	—	—	—	—	—	—	—	—
DDESS: DoDs Domestic[4]	—	—	—	—	—	—	—	—
Bureau of Indian Education	—	—	—	—	—	—	—	—
American Samoa	—	—	—	—	—	—	—	—
Guam	—	—	—	—	—	—	—	—
Commonwealth of the Northern Marianas Islands	—	—	—	—	—	—	—	—
Puerto Rico	—	—	—	—	—	—	—	—
U.S. Virgin Islands	196	10.6	80	6.4	62	6.0	49	4.6

— Not available. State or jurisdiction did not report dropout counts or reported counts that did not conform to the National Center for Education Statistics (NCES) definition.

[1] Ungraded student enrollment counts and ungraded dropout counts are not factored into these individual grade-level dropout rates.

[2] Totals include the 50 states and the District of Columbia.

[3] Due to item non-response, data for California and Nevada were imputed based on prior year reported data.

[4] DoDDS and DDESS are the Department of Defense Overseas Dependent Elementary and Secondary Schools and the Department of Defense Domestic Dependent Elementary and Secondary Schools, respectively.

NOTE: The event dropout rate is defined as the count of dropouts from a given school year divided by the count of student enrollments within the same grade span at the beginning of the same school year.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "NCES Common Core of Data State Dropout and Completion Data File," School Year 2008–09, Version 1a.

Appendix D

B-4. AVERAGE DAILY ATTENDANCE IN PUBLIC SCHOOLS, 2010–11

1.	CALIFORNIA	6,081,640
2.	TEXAS	4,551,084
3.	NEW YORK	3,085,515 *
4.	FLORIDA	2,520,054
5.	ILLINOIS	1,984,594 *
6.	PENNSYLVANIA	1,681,858 *
7.	OHIO	1,643,439 *
8.	GEORGIA	1,638,203 *
9.	MICHIGAN	1,527,733 *
10.	NEW JERSEY	1,431,418 *
11.	NORTH CAROLINA	1,338,471
12.	VIRGINIA	1,155,672 *
13.	ARIZONA	1,029,915 *
14.	INDIANA	992,304
15.	WASHINGTON	979,516
16.	MASSACHUSETTS	901,347
17.	TENNESSEE	897,807
18.	MISSOURI	837,024 *
19.	MARYLAND	799,355
20.	WISCONSIN	795,985 *
21.	COLORADO	782,090
22.	MINNESOTA	766,845 *
23.	ALABAMA	709,225
24.	SOUTH CAROLINA	664,056
25.	LOUISIANA	653,861
26.	KENTUCKY	622,041
27.	OKLAHOMA	616,775
28.	CONNECTICUT	574,120 *
29.	OREGON	498,293
30.	NEVADA	465,098 *
31.	MISSISSIPPI	453,695 *
32.	UTAH	443,449 *
33.	IOWA	438,715
34.	KANSAS	420,360
35.	ARKANSAS	365,075 *
36.	NEW MEXICO	323,130
37.	WEST VIRGINIA	285,870
38.	NEBRASKA	280,469
39.	IDAHO	267,099 *
40.	NEW HAMPSHIRE	182,544 *
41.	MAINE	173,864 *
42.	HAWAII	163,105
43.	RHODE ISLAND	117,999 *
44.	ALASKA	117,585
45.	SOUTH DAKOTA	116,208 *
46.	DELAWARE	114,683 *
47.	MONTANA	113,470 *
48.	NORTH DAKOTA	85,260
49.	WYOMING	81,518
50.	DISTRICT OF COLUMBIA	76,210 *
51.	VERMONT	67,559 *
	UNITED STATES	**46,913,205** *

NEA Research, Estimates Database (2011).

B-5. AVERAGE DAILY ATTENDANCE AS PERCENTAGE OF FALL ENROLLMENT, 2010–11

1.	NEW YORK	116.8 *
2.	NEW JERSEY	104.8 *
3.	NEVADA	101.8 *
4.	CONNECTICUT	101.4 *
5.	WEST VIRGINIA	101.3
6.	DISTRICT OF COLUMBIA	100.0 *
7.	CALIFORNIA	97.8 *
8.	GEORGIA	97.7 *
9.	NEW MEXICO	96.6
10.	ARIZONA	96.1 *
11.	ALABAMA	95.7
12.	FLORIDA	95.6
	UNITED STATES	**95.3** *
13.	PENNSYLVANIA	95.3 *
14.	INDIANA	94.8
15.	MINNESOTA	94.7 *
16.	ILLINOIS	94.6 *
17.	KENTUCKY	94.5
	NEW HAMPSHIRE	94.5 *
19.	MASSACHUSETTS	94.4
20.	NEBRASKA	94.1
	WASHINGTON	94.1
22.	NORTH CAROLINA	94.0
	SOUTH DAKOTA	94.0 *
24.	LOUISIANA	93.9
25.	MARYLAND	93.8
26.	IDAHO	93.6 *
27.	OKLAHOMA	93.5
28.	SOUTH CAROLINA	93.0
29.	MAINE	92.8 *
30.	COLORADO	92.7
31.	MISSOURI	92.6 *
	TEXAS	92.6
33.	MISSISSIPPI	92.5 *
	WYOMING	92.5
35.	VIRGINIA	92.3 *
36.	MICHIGAN	91.9 *
37.	WISCONSIN	91.3 *
38.	ALASKA	91.1
	HAWAII	91.1
40.	TENNESSEE	90.8
41.	NORTH DAKOTA	90.0
42.	DELAWARE	89.2 *
43.	OREGON	88.8
44.	IOWA	88.5
45.	OHIO	87.4 *
46.	KANSAS	87.3
47.	RHODE ISLAND	85.0 *
48.	MONTANA	80.7 *
49.	ARKANSAS	79.5 *
50.	VERMONT	78.9 *
51.	UTAH	77.0 *

Computed from NEA Research, Estimates Database (2011).

F-4. PUBLIC SCHOOL REVENUE PER STUDENT IN AVERAGE DAILY ATTENDANCE, 2010–11 ($)

1.	VERMONT	26,077	*
2.	ALASKA	20,289	*
3.	WYOMING	20,242	
4.	RHODE ISLAND	19,291	*
5.	MARYLAND	18,877	
6.	DELAWARE	17,959	*
7.	MASSACHUSETTS	17,511	
8.	PENNSYLVANIA	17,327	*
9.	NEW JERSEY	17,282	*
10.	CONNECTICUT	16,633	*
11.	MAINE	16,482	*
12.	HAWAII	16,260	
13.	NEW YORK	16,007	*
14.	NEW HAMPSHIRE	15,886	*
15.	ARKANSAS	14,911	*
16.	WISCONSIN	14,332	*
17.	MINNESOTA	14,085	*
18.	VIRGINIA	13,665	*
19.	MONTANA	13,505	*
20.	NORTH DAKOTA	13,427	
21.	KANSAS	13,315	
22.	MICHIGAN	13,087	*
23.	MISSOURI	12,997	*
24.	ILLINOIS	12,760	*
	UNITED STATES	**12,635**	*
25.	WASHINGTON	12,470	
26.	IOWA	12,351	
27.	DISTRICT OF COLUMBIA	12,278	*
28.	LOUISIANA	12,261	
29.	OREGON	12,198	
30.	WEST VIRGINIA	12,156	
31.	NEBRASKA	12,089	
32.	SOUTH CAROLINA	11,830	
33.	CALIFORNIA	11,541	
34.	GEORGIA	11,496	*
35.	OHIO	11,366	*
36.	INDIANA	11,349	
37.	NEW MEXICO	11,342	
38.	COLORADO	11,317	
39.	SOUTH DAKOTA	11,145	*
40.	TEXAS	11,061	
41.	UTAH	10,755	*
42.	FLORIDA	10,521	
43.	ALABAMA	10,258	
44.	MISSISSIPPI	10,043	*
45.	ARIZONA	9,984	*
46.	TENNESSEE	9,657	
47.	KENTUCKY	9,465	
48.	IDAHO	9,349	*
49.	NORTH CAROLINA	9,327	
50.	OKLAHOMA	9,236	*
51.	NEVADA	7,447	*
	MEDIAN	12,351	
	RANGE	18,629	
	SDEV.	3,585	
	CV	27	

Computed from NEA Research, Estimates Database (2011).

Appendix E

National Center for Education Statistics (NCES)
Institute of Education Sciences (IES)
National Assessment of Educational Progress (NAEP)

Average Mathematics, Reading, Science scale score sorted by gender, grade 12 public schools: By jurisdiction

		All students	All students	All students	All students
		2009	2009	2009	2009
Order	Jurisdiction	Math Scale Score	Reading Scale Score	Science Scale Score	Overall Score
N/A	National public	152.3029437	287.0595571	287.0595571	242.140686
N/A	Alabama	—	—	—	—
N/A	Alaska	—	—	—	—
N/A	Arizona	—	—	—	—
N/A	Arkansas	145.7993689	279.8846598	279.8846598	235.1895629
N/A	California	—	—	—	—
N/A	Colorado	—	—	—	—
N/A	Connecticut	156.448415	292.3508196	292.3508196	247.050018
N/A	Delaware	—	—	—	—
N/A	District of Columbia	—	—	—	—
N/A	DoDEA	—	—	—	—
N/A	Florida	148.0682367	282.6334833	282.6334833	237.7784011
N/A	Georgia	—	—	—	—
N/A	Hawaii	—	—	—	—
N/A	Idaho	152.5395855	290.1409912	290.1409912	244.273856
N/A	Illinois	154.1825829	291.5195945	291.5195945	245.7405907
N/A	Indiana	—	—	—	—
N/A	Iowa	156.2197529	290.6223739	290.6223739	245.8215002
N/A	Kansas	—	—	—	—
N/A	Kentucky	—	—	—	—
N/A	Louisiana	—	—	—	—

N/A	Maine	—	—	—	—
N/A	Maryland	—	—	—	—
N/A	Massachusetts	162.6544833	295.4572734	295.4572734	251.1896767
N/A	Michigan	—	—	—	—
N/A	Minnesota	—	—	—	—
N/A	Mississippi	—	—	—	—
N/A	Missouri	—	—	—	—
N/A	Montana	—	—	—	—
N/A	Nebraska	—	—	—	—
N/A	Nevada	—	—	—	—
N/A	New Hampshire	160.4337823	292.9695062	292.9695062	248.7909316
N/A	New Jersey	156.3494958	288.0905513	288.0905513	244.1768661
N/A	New Mexico	—	—	—	—
N/A	New York	—	—	—	—
N/A	North Carolina	—	—	—	—
N/A	North Dakota	—	—	—	—
N/A	Ohio	—	—	—	—
N/A	Oklahoma	—	—	—	—
N/A	Oregon	—	—	—	—
N/A	Pennsylvania	—	—	—	—
N/A	Rhode Island	—	—	—	—
N/A	South Carolina	—	—	—	—
N/A	South Dakota	159.7062142	291.9890962	291.9890962	247.8948022
N/A	Tennessee	—	—	—	—
N/A	Texas	—	—	—	—
N/A	Utah	—	—	—	—
N/A	Vermont	—	—	—	—
N/A	Virginia	—	—	—	—
N/A	Washington	—	—	—	—
N/A	West Virginia	141.3879082	279.3981132	279.3981132	233.3947115
N/A	Wisconsin	—	—	—	—
N/A	Wyoming	—	—	—	—

NOTE: National public is included for reference only and is not included in sorting the jurisdictions. Score differences are calculated based on differences between unrounded average scale scores.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2009 Mathematics Assessment.

Appendix F

State Name	Diploma Recipients (**)	Other High School Completers (**)	Averaged Freshman Graduation Rate
ALABAMA	42082	2168	69.9
ALASKA	8008	271	72.6
ARIZONA	62374	0	72.5
ARKANSAS	28057	†	74
CALIFORNIA	372310	†	71
COLORADO	47459	2918	77.6
CONNECTICUT	34968	368	75.4
DELAWARE	7839	154	73.7
DISTRICT OF COLUMBIA	3517	–	62.4
FLORIDA	153461	7073	68.9
GEORGIA	88003	5787	67.8
HAWAII	11508	256	75.3
IDAHO	16807	88	80.6
ILLINOIS	131670	319	77.7
INDIANA	63663	†	75.2
IOWA	33926	107	85.7
KANSAS	30368	121	80.2
KENTUCKY	41851	384	77.6
LOUISIANA	35622	5172	67.3
MAINE	14093	144	79.9
MARYLAND	58304	698	80.1
MASSACHUSETTS	65258	864	83.3
MICHIGAN	112742	416	75.3
MINNESOTA	59729	†	87.4
MISSISSIPPI	24505	2213	62
MISSOURI	62969	†	83.1
MONTANA	10077	†	82
NEBRASKA	19501	157	82.9
NEVADA	19904	–	56.3
NEW HAMPSHIRE	14757	413	84.3
NEW JERSEY	95085	†	85.3
NEW MEXICO	17931	454	64.8
NEW YORK	180917	5937	73.5
NORTH CAROLINA	86712	1497	75.1
NORTH DAKOTA	7232	†	87.4
OHIO	122203	†	79.6

OKLAHOMA	37219	†	77.3
OREGON	35138	1369	76.5
PENNSYLVANIA	130658	†	80.5
PUERTO RICO	29286	†	67.2
RHODE ISLAND	10028	3	75.3
SOUTH CAROLINA	39114	–	66
SOUTH DAKOTA	8123	†	81.7
TENNESSEE	60368	2331	77.4
TEXAS	264275	†	75.4
UTAH	30463	602	79.4
VERMONT	7209	†	89.6
VIRGIN ISLANDS	940	†	63.1
VIRGINIA	79651	8294	78.4
WASHINGTON	62764	397	73.7
WEST VIRGINIA	17690	†	77
WISCONSIN	65410	856	90.7
WYOMING	5493	123	75.2
Totals:	**3,069,241**	**51,954**	**n/a**

Data Source: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Dropout and Completion Data File", 2008-09, v.1a.

† indicates that the data are not
applicable.
– indicates that the data are missing.
‡ indicates that the data does not meet NCES data quality standards.

BUDGET REDUCTION COMPARISON RESULTS

Appendix G.

No athletic budget reduction the last four years

1. In which state is your school located?

	Response Percent	Response Count
State:	100.0%	326
	answered question	326
	skipped question	0

2. Grade Level

	Response Percent	Response Count
6-12	22.7%	74
7-12	19.9%	65
9-12	54.6%	178
10-12	2.8%	9
	answered question	326
	skipped question	0
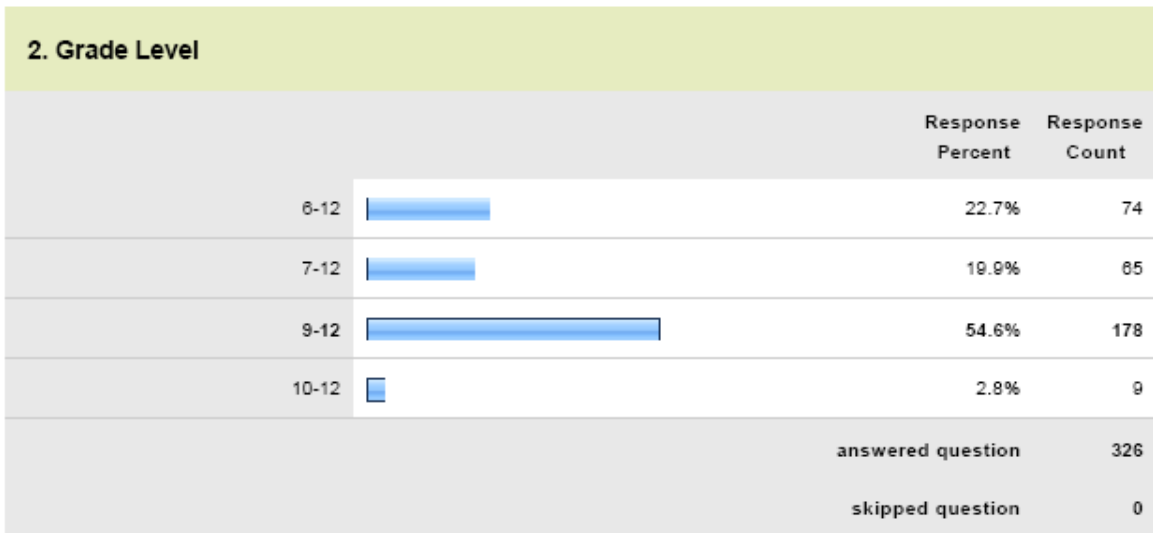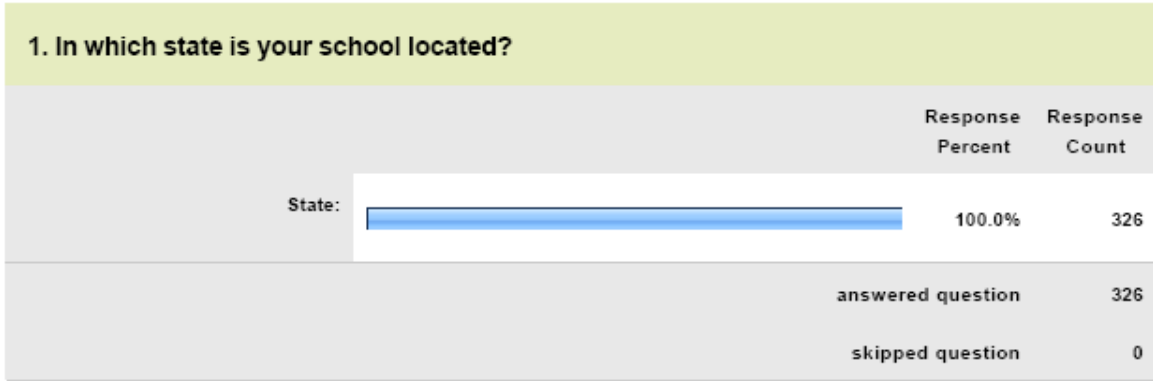
3. School enrollment (2011-12)

		Response Percent	Response Count
0-499		47.9%	156
500-999		28.8%	94
1000-1499		9.8%	32
1500-1999		6.7%	22
2000+		6.7%	22
	answered question		326
	skipped question		0

4. Best describes school setting

		Response Percent	Response Count
Urban Community		17.5%	57
Suburban Community		36.2%	118
Rural Community		46.3%	151
	answered question		326
	skipped question		0

5. Best describes school type

		Response Percent	Response Count
Public		62.6%	204
Private		35.0%	114
Charter		2.5%	8
	answered question		326
	skipped question		0

6. Gender distribution within your school student population (2011-12)

		Response Average	Response Total	Response Count
Female %		52.63	17,159	326
Male %		47.37	15,441	326
	answered question			326
	skipped question			0

7. Athletic participation distribution within your school student population (2011-12)

		Response Average	Response Total	Response Count
Athletes %		55.33	18,039	326
Non-Athletes %		44.67	14,561	326
	answered question			326
	skipped question			0

52

8. What is the average GRADUATION RATE for your overall student population in 2011-12?

	Response Percent	Response Count
98-100%	58.3%	190
95-97%	17.5%	57
90-94%	13.8%	45
85-89%	4.6%	15
80-84%	2.8%	9
75-79%	2.1%	7
Below 75%	0.9%	3
answered question		326
skipped question		0

9. What is the average DROPOUT RATE for your overall student population in 2011-12?

	Response Percent	Response Count
0-2%	72.1%	235
3-5%	17.2%	56
6-9%	6.1%	20
10-14%	3.7%	12
15-19%	0.3%	1
20-24%	0.0%	0
Higher 24%	0.6%	2
answered question		326
skipped question		0

53

10. What is the AVERAGE DAILY ATTENDANCE (ADA) RATE for your overall student population in 2011-12?

		Response Percent	Response Count
98-100%		15.0%	49
95-97%		44.2%	144
90-94%		31.3%	102
85-89%		7.1%	23
80-84%		1.8%	6
75-79%		0.6%	2
Below 75%		0.0%	0
	answered question		326
	skipped question		0

11. What is the average GRADE for your overall student population in 2011-12?

	A	B	C	D	F	Rating Count
Female	14.1% (46)	75.8% (247)	10.1% (33)	0.0% (0)	0.0% (0)	326
Male	9.2% (30)	66.3% (216)	23.3% (76)	0.0% (0)	1.2% (4)	326
					answered question	326
					skipped question	0

12. During the last four (4) years has your school's athletic program suffered budgetary reduction?

		Response Percent	Response Count
Yes, we had reductions		0.0%	0
No, reductions		100.0%	326
	answered question		326
	skipped question		0

Yes, athletic budget reduction

1. In which state is your school located?

		Response Percent	Response Count
State:		100.0%	635
	answered question		635
	skipped question		0

2. Grade Level

		Response Percent	Response Count
6-12		13.2%	84
7-12		13.9%	88
9-12		67.7%	430
10-12		5.2%	33
	answered question		635
	skipped question		0
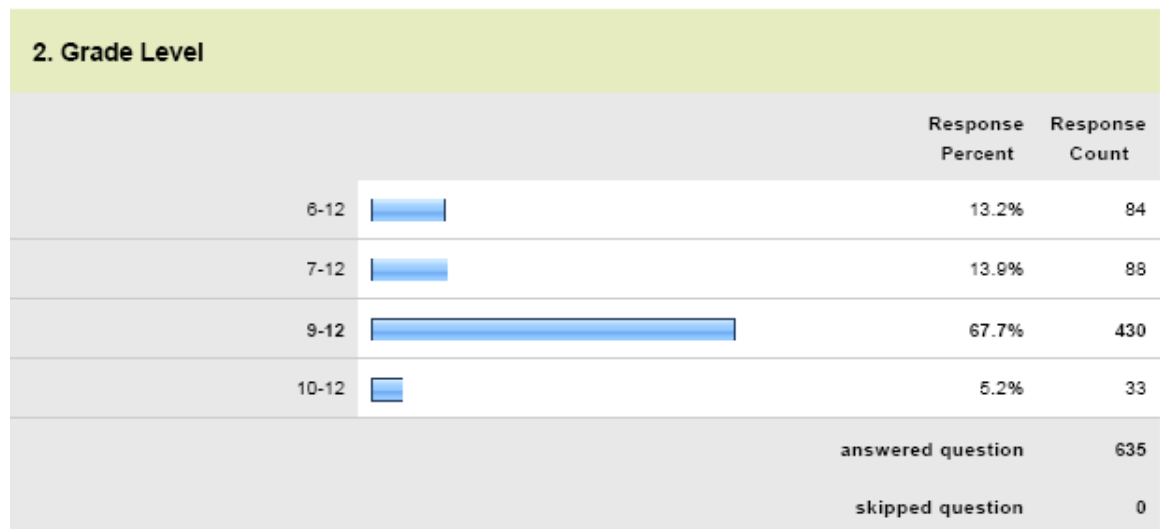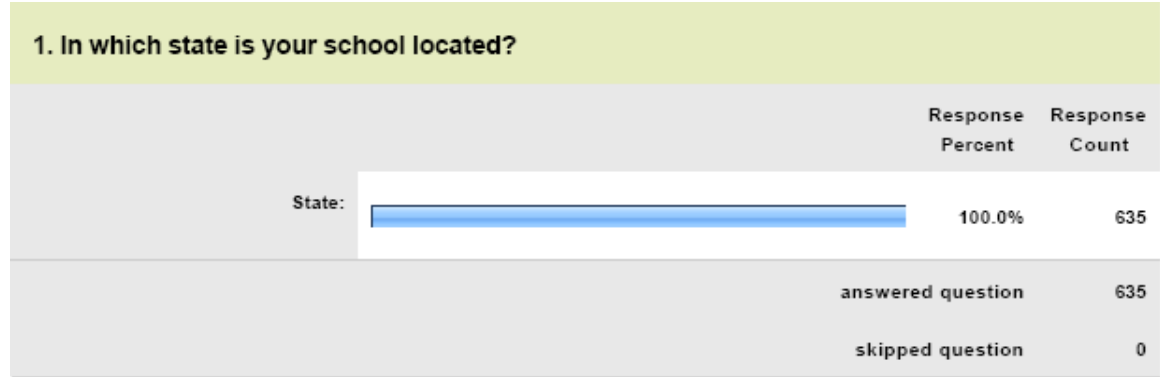
3. School enrollment (2011-12)

		Response Percent	Response Count
0-499		36.2%	230
500-999		25.0%	159
1000-1499		15.4%	98
1500-1999		12.6%	80
2000+		10.7%	68
	answered question		635
	skipped question		0

4. Best describes school setting

		Response Percent	Response Count
Urban Community		18.3%	116
Suburban Community		34.3%	218
Rural Community		47.4%	301
	answered question		635
	skipped question		0

5. Best describes school type

		Response Percent	Response Count
Public		83.8%	532
Private		13.7%	87
Charter		2.5%	16
		answered question	635
		skipped question	0

## 6. Gender distribution within your school student population (2011-12)

	Response Average	Response Total	Response Count
Female %	50.53	32,084	635
Male %	49.47	31,416	635
		answered question	635
		skipped question	0

7. Athletic participation distribution within your school student population (2011-12)

	Response Average	Response Total	Response Count
Athletes %	48.95	31,081	635
Non-Athletes %	51.05	32,419	635
		answered question	635
		skipped question	0
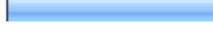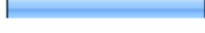
8. What is the average GRADUATION RATE for your overall student population in 2011-12?

		Response Percent	Response Count
98-100%		39.2%	249
95-97%		23.1%	147
90-94%		16.5%	105
85-89%		9.8%	62
80-84%		5.4%	34
75-79%		3.3%	21
Below 75%		2.7%	17
	answered question		635
	skipped question		0

9. What is the average DROPOUT RATE for your overall student population in 2011-12?

		Response Percent	Response Count
0-2%		54.3%	345
3-5%		25.0%	159
6-9%		10.9%	69
10-14%		5.0%	32
15-19%		3.1%	20
20-24%		0.9%	6
Higher 24%		0.6%	4
	answered question		635
	skipped question		0

10. What is the AVERAGE DAILY ATTENDANCE (ADA) RATE for your overall student population in 2011-12?

	Response Percent	Response Count
98-100%	10.1%	64
95-97%	39.1%	248
90-94%	36.5%	232
85-89%	9.0%	57
80-84%	3.8%	24
75-79%	1.1%	7
Below 75%	0.5%	3
answered question		635
skipped question		0

11. What is the average GRADE for your overall student population in 2011-12?

	A	B	C	D	F	Rating Count
Female	8.0% (51)	78.7% (500)	13.2% (84)	0.0% (0)	0.0% (0)	635
Male	5.0% (32)	61.7% (392)	32.1% (204)	0.9% (6)	0.2% (1)	635
answered question						635
skipped question						0

12. During the last four (4) years has your school's athletic program suffered budgetary reduction?

	Response Percent	Response Count
Yes, we had reductions	100.0%	635
No, reductions	0.0%	0
answered question		635
skipped question		0

Appendix H

2011-12 HIGH SCHOOL ATHLETICS PARTICIPATION SURVEY
Conducted By
THE NATIONAL FEDERATION OF STATE HIGH SCHOOL ASSOCIATIONS
Based on Competition at the High School Level in the 2011-12 School Year

Sport (Number of states reporting for boys/girls)	BOYS		GIRLS		COMBINED
	Number of Schools	Number of Participants	Number of Schools	Number of Participants	Number of Participants
ADAPTED SPORTS					
Basketball	35	280	33	215	495
Bowling	113	851	111	632	1,483
Floor Hockey	61	276	61	188	464
Soccer	96	594	96	418	1,012
Softball	119	648	121	687	1,335
Track	69	525	69	463	988
AIR RIFLERY	46	561	46	433	994
ARCHERY	59	812	60	677	1,489
BADMINTON	213	4,573	447	12,150	16,723
BASEBALL	15,838	474,219	70	998	475,217
BASKETBALL	18,099	535,289	17,768	435,885	971,174
BOWLING	2,467	27,441	2,451	25,348	52,789
CANOE PADDLING, OUTRIGGER	59	1,276	60	1,410	2,686
COMPETITIVE SPIRIT SQUADS	795	3,032	4,916	108,307	111,339
CREW	124	2,464	228	6,261	8,725
CROSS COUNTRY	14,155	248,494	13,970	212,262	460,756
DANCE/DRILL	439	402	1,434	24,348	24,750
DRILL TEAM	47	547	266	4,434	4,981
EQUESTRIAN	58	188	213	1,430	1,618
FENCING	94	1,925	99	1,771	3,696
FIELD HOCKEY	9	297	1,788	60,607	60,904
FLAG FOOTBALL	13	251	207	6,260	6,511
FOOTBALL - 11-Player	14,241	1,095,993	421	1,604	1,097,597
6-player	218	4,427	10	1	4,428
8-player	696	16,326	20	200	16,526
9-player	234	4,998	0	0	4,998
GOLF	13,624	152,725	9,667	71,086	223,811
GYMNASTICS	109	2,353	1,495	19,119	21,472
ICE HOCKEY	1,596	35,732	600	8,833	44,565
JUDO	49	739	46	409	1,148
LACROSSE	2,338	100,641	2,118	74,993	175,634
RIFLERY	217	2,000	184	985	2,985
RODEO	44	110	50	118	228
SKIING - ALPINE	552	5,806	539	4,657	10,463
SKIING - CROSS COUNTRY	326	4,266	330	4,657	8,923
SNOWBOARDING	54	711	46	310	1,021
SOCCER	11,600	411,757	11,127	370,975	782,732
SOFTBALL - FAST PITCH	74	1,376	14,142	367,023	368,399
SOFTBALL - SLOW PITCH	7	24	516	13,406	13,430
SWIMMING AND DIVING	7,001	133,823	7,221	160,456	294,279
SYNCHRONIZED SWIMMING	4	60	31	575	635
TEAM TENNIS	1,857	36,160	1,894	37,223	73,383
TENNIS	9,841	159,800	10,058	180,870	340,670
TRACK AND FIELD - INDOOR	2,644	69,360	2,588	59,990	129,350
TRACK AND FIELD - OUTDOOR	16,218	575,628	16,143	468,747	1,044,375
VOLLEYBALL	2,180	49,467	15,569	418,903	468,370
WATER POLO	783	20,721	785	18,749	39,470
WEIGHTLIFTING	748	19,592	470	8,479	28,071
WRESTLING	10,407	272,149	1,441	8,235	280,384
OTHER	270	3,298	216	1,746	5,044

NATIONAL FEDERATION OF STATE HIGH SCHOOL ASSOCIATIONS
2011-12 ATHLETICS PARTICIPATION SUMMARY

TEN MOST POPULAR BOYS PROGRAMS

	Schools			Participants	
1.	Basketball	18,099	1.	Football – 11-Player	1,095,993
2.	Track and Field – Outdoor	16,218	2.	Track and Field – Outdoor	575,628
3.	Baseball	15,838	3.	Basketball	535,289
4.	Football – 11-Player	14,241	4.	Baseball	474,219
5.	Cross Country	14,155	5.	Soccer	411,757
6.	Golf	13,624	6.	Wrestling	272,149
7.	Soccer	11,600	7.	Cross Country	248,494
8.	Wrestling	10,407	8.	Tennis	159,800
9.	Tennis	9,841	9.	Golf	152,725
10.	Swimming and Diving	7,001	10.	Swimming and Diving	133,823

TEN MOST POPULAR GIRLS PROGRAMS

	Schools			Participants	
1.	Basketball	17,768	1.	Track and Field – Outdoor	468,747
2.	Track and Field – Outdoor	16,143	2.	Basketball	435,885
3.	Volleyball	15,569	3.	Volleyball	418,903
4.	Softball – Fast Pitch	14,142	4.	Soccer	370,975
5.	Cross Country	13,970	5.	Softball - Fast Pitch	367,023
6.	Soccer	11,127	6.	Cross Country	212,262
7.	Tennis	10,058	7.	Tennis	180,870
8.	Golf	9,667	8.	Swimming and Diving	160,456
9.	Swimming and Diving	7,221	9.	Competitive Spirit Squads	108,307
10.	Competitive Spirit Squads	4,916	10.	Lacrosse	74,993

ATHLETICS PARTICIPATION SURVEY TOTALS

Year	Boys Participants	Girls Participants	Total	Year	Boys Participants	Girls Participants	Total
1971-72	3,666,917	294,015	3,960,932	1993-94	3,472,967	2,130,315	5,603,282
1972-73	3,770,621	817,073	4,587,694	1994-95	3,536,359	2,240,461	5,776,820
1973-74	4,070,125	1,300,169	5,370,294	1995-96	3,634,052	2,367,936	6,001,988
1975-76	4,109,021	1,645,039	5,754,060	1996-97	3,706,225	2,474,043	6,180,268
1977-78	4,367,442	2,083,040	6,450,482	1997-98	3,763,120	2,570,333	6,333,453
1978-79	3,709,512	1,854,400	5,563,912	1998-99	3,832,352	2,652,726	6,485,078
1979-80	3,517,829	1,750,264	5,268,093	1999-00	3,861,749	2,675,874	6,537,623
1980-81	3,503,124	1,853,789	5,356,913	2000-01	3,921,069	2,784,154	6,705,223
1981-82	3,409,081	1,810,671	5,219,752	2001-02	3,960,517	2,806,998	6,767,515
1982-83	3,355,558	1,779,972	5,135,530	2002-03	3,988,738	2,856,358	6,845,096
1983-84	3,303,599	1,747,346	5,050,945	2003-04	4,038,253	2,865,299	6,903,552
1984-85	3,354,284	1,757,884	5,112,168	2004-05	4,110,319	2,908,390	7,018,709
1985-86	3,344,275	1,807,121	5,151,396	2005-06	4,206,549	2,953,355	7,159,904
1986-87	3,364,082	1,836,356	5,200,438	2006-07	4,321,103	3,021,807	7,342,910
1987-88	3,425,777	1,849,684	5,275,461	2007-08	4,372,115	3,057,266	7,429,381
1988-89	3,416,844	1,839,352	5,256,196	2008-09	4,422,662	3,114,091	7,536,753
1989-90	3,398,192	1,858,659	5,256,851	2009-10	4,455,740	3,172,637	7,628,377
1990-91	3,406,355	1,892,316	5,298,671	2010-11	4,494,406	3,173,549	7,667,955
1991-92	3,429,853	1,940,801	5,370,654	2011-12	4,484,987	3,207,533	7,692,520
1992-93	3,416,389	1,997,489	5,413,878				

2011-12 SUMMARY OF ATHLETICS PARTICIPATION
TOTALS BY STATE

Rank State	Boys	Girls	Total[1]	Rank State	Boys	Girls	Total[1]
1. Texas	490,816	317,990	808,806	27. Mississippi	63,886	37,000	100,886
2. California	456,633	325,279	781,912	28. Oregon	56,218	42,372	98,590
3. New York	215,447	174,028	389,475	29. Kentucky	52,931	42,515	95,446
4. Illinois	205,218	141,678	346,896	30. South Carolina	60,112	34,193	94,305
5. Ohio	197,420	135,929	333,349	31. Alabama	60,360	29,400	89,760
6. Pennsylvania	170,608	147,261	317,869	32. Oklahoma	44,284	42,664	86,948
7. Michigan	176,734	131,346	308,080	33. Nebraska	45,751	31,258	77,009
8. New Jersey	153,314	105,905	259,219	34. Arkansas	35,967	21,556	57,523
9. Florida	149,994	107,288	257,282	35. Utah	33,625	23,304	56,929
10. Minnesota	124,657	113,706	238,363	36. Maine	29,028	23,964	52,992
11. Massachusetts	123,567	95,365	218,932	37. Idaho	25,945	19,006	44,951
12. North Carolina	124,168	81,113	205,281	38. New Hampshire	23,751	20,761	44,512
13. Georgia	115,918	76,011	191,929	39. New Mexico	24,276	19,526	43,802
14. Wisconsin	112,754	78,938	191,692	40. Nevada	26,153	16,225	42,378
15. Virginia	100,968	72,885	173,853	41. Hawaii	21,096	15,226	36,322
16. Missouri	102,760	68,803	171,563	42. West Virginia	21,137	14,895	36,032
17. Washington	93,840	71,018	164,858	43. Montana	18,468	14,029	32,497
18. Indiana	90,380	61,333	151,713	44. Rhode Island	16,449	12,126	28,575
19. Iowa	84,479	57,314	141,793	45. South Dakota	16,192	12,250	28,442
20. Colorado	72,218	56,812	129,030	46. Delaware	15,322	11,769	27,091
21. Maryland	67,422	49,235	116,657	47. North Dakota	14,853	10,646	25,499
22. Arizona	61,767	49,925	111,692	48. Alaska	12,042	10,313	22,355
23. Connecticut	61,593	48,457	110,050	49. Wyoming	10,681	8,236	18,917
24. Tennessee	69,798	38,650	108,448	50. Vermont	8,345	6,964	15,309
25. Kansas	62,128	40,240	102,368	51. District of Columbia	2,178	1,262	3,440
26. Louisiana	61,336	39,564	100,900				