

Smart Boys Bad Grades

Why boys get worse grades than girls and are only 35% of graduates in higher education



Landon and Willie doing school work by logging onto the Internet from the roof of the house.



- By -
Julie Coates and William A. Draves

Smart Boys, Bad Grades

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Finally, answers to one of the biggest crises in education today.

Never before released, this report contains new information not available anywhere else.

Coates and **Draves** have done the research. They have surveyed teachers, talked to boys, looked at grades in online grading systems, reviewed the literature, monitored the studies, talked with parents, and mentored almost a dozen boys themselves.

Parents will acquire new understanding about their sons that make sense.

Teachers will get practical techniques to help boys learn.

Schools and colleges have the evidence to change policies and procedures.

Media will have a story to help millions of parents.

The authors thank the American School Board Journal, Doug Carroll of the Arizona Republic and the BBC's Education writer Mike Baker for coverage of their preliminary work. The BBC calls Coates and Draves' work "Fascinating."

What to do:

1. Read the report thoroughly to understand this important issue. The answers are summarized on page 6.
2. Tell others about this issue and the answers.
3. Send the authors any data you have about the issue.

Follow up action:

- Parents, go to www.smartboysbadgrades.com for free tips on how to advocate and support your son.
- Teachers, go to www.smartboysbadgrades.com to get a complimentary copy of the Top 20 Tips for teachers in helping boys learn.
- Schools and colleges should contact the authors about seminars for faculty and administrators.
- Media contact the authors for an interview.

Why This Report is Unique

1. It is the first to pose an answer to the problem and provide solutions.
2. It has data and approaches the issue from a multi-national and societal perspective rather than treating it as a strictly national issue.
3. It is the only report which documents that this problem occurred in the same time-frame 100 years ago as well, showing the historical parallels.
4. It is the only report which explains why the problem is relatively recent, since 1980.

The Problem

There are two related problems:

1. Boys get worse grades than girls;
2. Boys are now a declining percentage of students and graduates in higher education.

It is this latter issue which is a serious educational crisis in advanced, post-industrial countries, and has led to the interest of the grades issue.

Only 35% of higher education graduates are male

Reports from post-industrial countries around the world all confirm that boys constitute a declining minority of students in higher education (1). The latest data from the National Center for Education Statistics (NCES) in the United States has only 43% of students in higher education as male, down from 50% in 1980 and a majority of students before 1980 (2).

Best's College Guide for 2004 reports participation at individual colleges as low as 26% at Sarah Lawrence College (3). In the state of Wisconsin, for example, only one public university out of 16 in the state reported half of its students were male.

Using a line extension, we estimate the participation of males in higher education for 2004-2005 to be around 40%.

Another study shows that the completion rate for males and females is different. That is, some 66% of females in college graduate, while only 59% of males graduate. Applying the 59% figure to the 40% attendance rate, we get around 35% of graduates being male.

Boys get worse grades in school

Boys get 70% of Ds and Fs in school, according to Michael Gurian (4), and girls get 60% of As. Some 80% of drop outs are boys. Both boys and girls say teachers favor girls in the classroom.

And most telling, the Grade Point Average (GPA) for boys is significantly lower than that for girls (5). While the authors are trying to find a statistical measure that portrays the relative magnitude of this difference, our analysis from the data from schools indicate that boys' GPA is about 20% lower than girls (6).

The Problem is Internationally Documented

The issue exists in many if not most post-industrial countries. A recent provincial report in Canada begins, "Over the last 15 years, it has become apparent that girls do better than boys at school, not only in Quebec but in most of the developed world." (7) A Guardian article in the United Kingdom on A-level results is headlined, "The trouble with boys: getting them to study is no easy matter." (8) It is a problem in New Zealand. (9) It is an issue in Ireland. (10) And a special report on the issue in Australia called "The Education of Boys" states that "females dominate higher education enrolments." (11) There is a striking similarity in percentages and numerical differences in the studies in all post-industrial countries.

Here we look at some of the theories as to why boys under-perform in school, and then offer a different rationale for why boys under-perform in school, as well as suggest a solution to resolve the problem

We are strictly concerned with the performance of boys in the upper half of their classes in terms of ability, test scores, grades and future work. While there are legitimate and serious concerns about boys in lower income families, and those significantly behind their counterparts in school, that issue has been with us for a long time.

Significance for boys

- The significance for boys is serious, and long lasting. Some of the impacts:
- Boys are less able to learn.
 - Boys are emotionally affected, which further inhibits their learning.
 - Boys are less likely to feel they can continue their formal education in the future. (12)
 - A college education is increasingly recognized as a prerequisite for entrance into the knowledge jobs of the 21st century, thus boys are not as prepared for the work world as they want to be.
 - The emotional scars stay with them throughout life. (13)

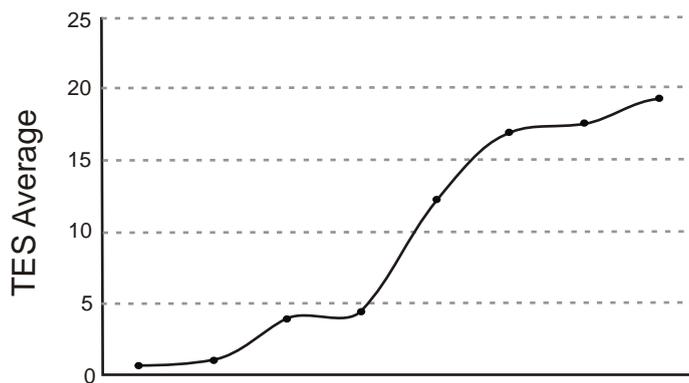
Impact on society

The issue does not only impact boys. It has a serious negative impact on society, especially in this time of economic transition for post-industrial nations.

The chart below is the from the Department of Education, Training and Youth Affairs in Australia, 2000, and shows the gap between boys and girls starting in 1980 and growing to around 20% difference in 1996.

Some of the implications:

- Having millions of intelligent boys without college educations underutilizes this wealth of talent in the workplace.
- The economy of a country is negatively affected when the creative, analytical, and leadership qualities intelligent young men contribute are not cultivated and maximized.
- Adults' retirement income is dependent on government stipends such as Social Security. When young people have low paying jobs because of a lack of higher education, they contribute less to the retirement funds of adults in retirement.
- Adults' retirement income may be partially dependent on private income sources such as dividends from the stock market. When an economy is underperforming, stocks also underperform.



■ Girls look to talented boys for relationships, marriage and family. These relationships are strained when young men of equal talents have fewer credentials, income potential and are behind in their career paths relative to their present or future mates. Thus children and families are ill served when the husband and father has less education than he should and could have.

Thus the problems this issue creates are long term and affect all members of society.

Characteristics of the Problem

Three important characteristics of the problem are:

- **Multinational.** It occurs in many if not most post-industrial advanced nations, including the United Kingdom, Scandinavia, Australia, New Zealand, Canada, including French speaking Quebec, and the United States.

- **Recency.** The problem of declining percentage of boys in higher education is recent, starting around 1980. It did not occur 30-60 years ago, when boys were roughly scholastically equal to girls. While girls overall have had better grades, the differences have been much slighter. In Australia, for example, the differences were marginal until 1981 when girls had 0.6 marks more than boys. This difference jumped to 19.4 marks, most noticeably in 1992 when the difference increased to 12.2 from 4.4 marks the previous year. 1992 was also the first year after the invention of the World Wide Web.

- **Economic level.** What is different now is that smart boys from upper socio-economic levels are now falling behind their female counterparts. The Quebec research notes, "Given the same social origins, girls do better than boys at all levels of education." While the roots of the problem go back one to two decades, the issue has only recently surfaced and become an issue.

Delineating the Issue

The issue being addressed here is specific to "smart boys" and to "bad grades."

We need to isolate this issue and not confuse it with the many other issues relating to both education and to boys.

- The issue dealt with here is primarily concerned with boys who have the academic talent to perform well in school and to successfully complete college, our so-called "smart boys." Thus, we are not addressing issues concerning boys who perform in the lower half of their class.

- The issue dealt with here is limited to college participation and the impact that grades in secondary school have on college attendance. We are not dealing with issues outside of the school, college and academic setting.

The Answers in Brief

The underlying reason boys get worse grades and attend higher education in declining percentages is because boys have different biological and neurological characteristics than girls. This means that:

1. **Generations learn differently.** Boys learn differently than girls, and today's boys also learn differently than previous generations of students.
2. **Boys are actually ahead.** Because of their neurology, boys are actually ahead in leading society into the new economic age of the 21st century.
3. **Boys are punished for late homework.** GPAs are lower because of behavior unrelated to learning and knowledge. Smart boys turn in homework late, and this is also explained by the boys' hard wiring.

Long Term Solutions

The long term solutions are:

1. That teachers take into account the neurological and biological differences in their teaching of boys and implement techniques and good pedagogical practices which enhance the learning of boys.
2. That schools and colleges be redesigned to meet the needs of students in the Information Age of the 21st century, rather than becoming increasingly obsolete and focused on preparing students for work and life in the outmoded Industrial Age of factories and manufacturing.

The Immediate Solution

The immediate solution is that late homework not be penalized. Behavior unrelated to learning and knowledge should not be included in GPA.

Late homework should be accepted without penalty. Where teachers accept homework turned in late, they report few problems. (14) The solution does not cost money. The solution can be implemented immediately by an individual teacher, school or college, or educational system.

Other Explanations Ruled Out

Various other explanations have been suggested, all without adequate research, data or documentation. These explanations need to be dismissed. There is no data to support them. They include:

- Boys are not as intelligent as girls.
- Parents are not raising their boys with good academic habits.
- The statistics are skewed because of changing participation of minority and low-income students.
- The problem lies in recent social problems in families, particularly the increased number of single parent families and greater numbers of children from divorced parents.
- Boys today behave badly.
- There are psychological and/or behavioral issues with boys today.
- Boys are lazy and unmotivated.
- Boys just want to play.
- We need to raise boys like we raise girls.

None of these ideas have a research base, consistent data, nor evidence across national and economic income levels. Each can be easily dismissed by existing evidence.

Boys Learn differently than girls

Boys are punished for behavior which is neurologically based, and which does not hurt or negatively impact the learning of others.

Institutions create learning environments

Institutions create learning environments. The environments can respond equally to boys and girls, or they can respond to one gender or the other. We know this because there is one institution that does not respond well to how girls learn. Consequently, there is one institution where girls are behind boys in terms of academic achievement.

There is one university that admits boys and girls equally, and then has boys get higher grades. (15) So the gap is not “natural” against boys, educational policies can go either way (or be equal, as we advocate). The university is Cambridge University in the U.K. and they recognize that the skew in favor of boys is not right either. Officials there attribute the inequality in achievement to not responding to the neurological differences in how girls learn, and they are correct.

The Brain Evidence

Michael Gurian and many other researchers outline the differences between how boys learn, and how girls learn, and thus how we need to take those differences into account when helping boys learn. Some examples of gender differences:

- Males have 15% less serotonin than females.
- Boys' attention span is shorter than girls'.
- Boys are more adept at learning spatially than girls.
- Boys need more physical movement than girls for learning.
- Boys need more emotional assurance, since their limbic system of the brain is more primitive and not as advanced as girls' limbic system.
- Boys do not process emotions quickly.
- Boys mature later than girls
- Boys' brains need more rest

Late homework: a major cause of the GPA gap.

A major reason for the GPA gap is homework. If you look at boys' work, their test scores are fairly equal with girls. It is homework where boys overall fall well short of girls. (16)

We looked at grades of one or more boys using an online grading system. The online grading system, which is able to separate test from homework components of a grade, showed higher grades for tests. Only homework dragged down the grades. We also confirmed this with interviews with dozens of boys.

We also did a random survey of 200 K-12 teachers across North America. Some 84% said boys turn in homework late, only 4% said girls. Another 8% said neither, and the final 4% said they did not know.

A second question asked whether turning homework in on time would improve the students' homework scores. Some 96% said yes, only 4% said no. Thus, K-12 teachers confirm that boys turn in homework late more than girls, and that boys are penalized for turning in homework late.

But we're instilling discipline and good work force behavior?

Actually no. If teachers were instilling discipline and good behavior, then the gap in GPAs would close or get smaller between sixth grade and senior in college. However, the gap never closes. That is, seniors in college have the same gap.

When one looks at GPAs for freshmen through seniors in high school at a typical high school in Madison, Wisconsin, one finds that the GPA never closes.

The gap does not close in college either. This is confirmed by the data, such as the study done at Truman State University in Missouri, where data was presented over four years, by freshman, sophomore, junior, senior years.

But we're preparing boys for the workforce.

Actually, there's no problem with boys in the workforce. Boys at work both

- a) show up on time; and
- b) turn work in on time, relative to girls in the work place.

There are no studies that young men perform more poorly than young women in the work place. We have interviewed human resource professionals, and they indicate there is no problem. There is no perceived problem of boys in the workforce on the part of employers, workers or even educators.

Researchers have not found any citations or references on the web as to any gender differences at work. We are only able to document evidence that women perform at the same level in the workplace as men, and most commentary on workplace gender issues tries to confirm that women perform up to men in the workplace.

In addition, we asked human resource executives if there is a problem of either gender showing up for work late or submitting work late. No human resource executive has documented any problem. We interviewed staff at two human resources associations and the president of a national employment agency. (17)

Some educators have told us that boys who simultaneously are enrolled in school and have part-time jobs, show up on time for work and turn in homework late. (18) Thus, there's no problem in the work place, only in academia.

The homework solution:

1. No penalty for turning in homework late.
2. Students can redo homework/assignments until they get them right.
3. Students can quiz out of homework/assignments they already know.

Why boys turn in homework late.

A major reason why smart boys do not turn homework in on time is that boys are neurologically geared towards unsolved problems and challenges. That is, if they do not know it, they focus on it. If they already know it, it becomes “boring” and is very hard to focus and turn in. Dylan, an eighth grader in San Antonio, says if his homework is hard, it takes him a half hour; and if his homework is easy, it takes him an hour and a half.

In another example, Tristan, age 15, an African-American boy we mentored, had 30 math problems. He did 10 questions. He got all 10 right. His teacher gave him an “F” of course. So his teacher says that Tristan does not know his math, when in fact, he gets every problem correct.

The differences between the workplace and school

We have been asked why boys turn homework in late at school but accomplish their jobs in the workplace on time. Boys show up late at school, but then proceed to show up for sometimes “boring” jobs on time.

We suggest the following differences between work and school:

There is a tangible outcome to work, and no tangible outcome for schoolwork.

There is a visible external reward for turning work in on time, and no reward for turning schoolwork in on time.

Boys are more likely to be praised for completing work on a job, while at school deficiencies or inadequacies are far more likely to be highlighted.

A boss rarely punishes workers, while boys perceive that schools frequently punish them.

There is an intrinsic reward in doing a job.

The rules of the workplace make sense to boys, while many rules in school do not seem to make sense to many boys.

The behavior value

Adults value behavior in the classroom because schools in the 20th century prepared students for work in the factory.



The 20th century school, above, was deliberately designed to look and function like a factory.

Behavior was absolutely critical to the efficiency of factory production. Thus, behavior standards unrelated to the well-fare of others became incorporated into schools.

As we have shown, there are no behavior issues for boys in the workplace, regardless of their level of schooling or grades in school.

Yet, regardless of the fact that there is no reason for penalizing late homework, many adults will still resist eliminating penalties for late homework.

The “no penalty for late homework” standard is likely to meet with as much resistance in the early 21st century as the “no hitting” standard met in the early 20th century. In the early 20th century hitting one's child, or one's student, was a clearly positive moral value for many if not most parents and teachers. (19) In a classic scene from the first talking motion picture ever made, future jazz singer Al Jolson runs away from home after getting a whipping from his father, who clearly regards the whipping as good parenting and a moral duty. Like penalizing late homework, hitting had no positive outcome, and led to boys dropping out of school in large numbers until the practice ceased.

Boys are actually ahead

Reporter: Did you play anything when you were a boy? George Gershwin: Only hooky. (Interview in early 20th century)

Because of their neurology, boys are ahead of both girls and adults in terms of technology. Boys also exhibit those accompanying attributes which go with a future dominated by the Internet, like taking risks, being entrepreneurial, and being collaborative. Thus they are leading society into the Internet Age.

Futhermore, what is bad behavior for boys in school is good behavior for young men in the workplace. The very same behaviors which are punished in school are rewarded when boys enter the workforce. This is because taking risks, being entrepreneurial and being collaborative are all behaviors that lead to success in the workforce today.

It all happened once before

This all happened once before, exactly 100 years ago, and for the very same reason. That is, neurologically, boys lead society into the new economic age. (20) Some 100 years ago today's post-industrial societies were all moving from an agrarian economy to an industrial economy. The same phenomenon with boys occurred back then. Boys were “bad” in school, dropped out, went into the workforce, and led society into the Industrial Age of the 20th century.

Why boys are into technology

While girls use the Internet as frequently as boys, boys are demonstrably more competent with new technology than girls. In several different studies in several different countries, boys score much higher on computer subjects, as well as the related math and science subjects.

Boys are naturally more into new technology than girls. Dr. Judith Kleinfeld, a professor at the University of Alaska at Fairbanks, in her groundbreaking article "The Myth That Schools Shortchange Girls," provides the documentation on why this is so. (21)

She says boys have a greater variability in many human characteristics than do girls. So boys and girls have different bell shaped curves to describe their variability. Both curves have the same averages, she notes, but they have different peaks and slopes.

Girls have a much higher peaked curve than boys, putting girls much more in the middle or being similar in terms of human characteristics. (22)

Boys, on the other hand, show a bell shaped curve with much more variability, according to Kleinfeld. Thus, at the leading edge of the curve one finds more boys than girls. Applied to technology, there are more boys than girls engaged in the new technology and the accompanying behavior required in the new economy of the Internet Age.

This can be demonstrated by the numbers of young men in technology related occupations. Thus, because they are on the neurological "cutting edge," boys are the first to adopt the behavior and values of the new economic age.

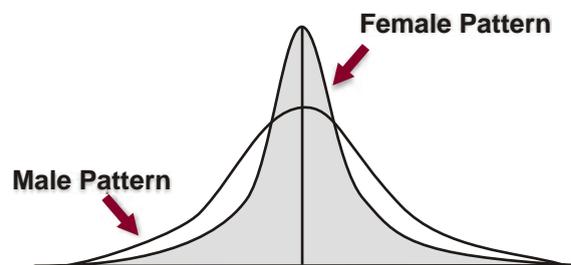


Illustration: Same Average, Different Variability

This occurred 100 years ago, when our grandfathers dropped out of school in large numbers and took jobs in the factory, creating the behaviors and values that were necessary for success in the Industrial Age of the 20th century.

This advance entry of boys into the Internet Age, then, explains why the issue of Smart Boys, Bad Grades began emerging around 1980, when computers began to impact society, and why it will continue until schools and colleges are redesigned to reflect the needs of the 21st century.

For a more indepth explanation of this, see "Nine Shift: Work, Life and education in the 21st century" by William A. Draves and Julie Coates, Chapter 4, pages 57 74, and Chapter 12, pages 201 - 228.

Conclusion

Our research, combined with the research of others, clearly finds that:

The gap in GPA between boys and girls in secondary school is due in large measure to penalties for turning in homework late.

- Boys' test scores are equal to girls and thus do not account for the GPA gap. This also shows that the GPA gap is not due to any academic reason and that the gap is caused by non-academic (i.e. behavior) reasons.
- That penalizing boys for turning in homework late has no positive effect in getting homework turned in on-time.
- That there is no good reason for penalizing boys for late homework.
- That eliminating the penalty for late homework would reduce the GPA gap between boys and girls, eliminate needless and counterproductive punishment of boys, and provide the conditions for millions of academically qualified boys to attend college.

Supporting Documentation Attached

The following are some of the documentation that supports this research.

- A. The GPA gap does not close in secondary school. Penalizing late homework does not work. The GPA gap does not close as students go through school. Chart is from Madison Metropolitan School District, Madison, Wisconsin.
- B. The GPA gap exists and does not close in college. Even when colleges admit boys and girls with the same high school GPAs, boys get lower GPAs in college. Punishing late homework does not work in college, either. This data from Truman College shows that the GPA gap does not close in college.
- C. GPA scores do not equate with test scores. As this chart illustrates, boys get lower GPAs yet have equal or higher test scores as incoming freshman. Chart is from University of Massachusetts Amherst scores and GPA for incoming freshmen.
- D. The problem is not going away. National Center for Education Statistics (NCES) data confirming that boys have lower GPAs than girls. The data is from 1990 through 2000.
- E. The problem is homework. Online grading systems allow parents and educators to see that boys' test scores are much higher than their homework scores. To verify this, Coates and Draves surveyed K-12 teachers and asked them if boys or girls turned in homework late. We then asked if they penalized for late homework. The results were statistically valid and conclusive.
- F. Parental expectations are not the problem. Parents of boys have just as high expectations as parents of girls, according to this study.
- G. Boys had just as high educational expectations as girls up until around 1980, when the gap began appearing and has been since widening. Chart from "The Gender Gap in College Expectations" by John Reynolds, Florida State University.
- H. Other reasons are ruled out. Other explanations can be easily ruled out as a cause of the current educational crisis.

THE HIGH SCHOOL CUMULATIVE GRADE POINT AVERAGES BY GENDER

TOTAL							
		FEMALE		MALE		TOTAL	
GRADE	YEAR	n	GPA	n	GPA	n	GPA
9	1991	801	2.37	835	2.23	1636	2.37
9	1992	852	2.34	855	2.21	1707	2.34
9	1993	840	2.35	884	2.28	1724	2.35
9	1994	825	2.39	919	2.42	1744	2.39
9	1995	956	2.54	949	2.25	1905	2.40
9	1996	907	2.52	995	2.27	1902	2.39
9	1997	926	2.58	1042	2.29	1968	2.42
9	1998	981	2.63	1070	2.23	2051	2.42
9	1999	938	2.58	1031	2.39	1969	2.48
9	2000	969	2.62	1080	2.38	2049	2.49
9	2001	1115	2.67	1148	2.35	2263	2.51
9	2002	1107	2.75	1151	2.43	2258	2.59
9	2003	1169	2.77	1095	2.37	2264	2.58
9	2004	1033	2.71	1091	2.39	2124	2.55
10	1991	753	2.50	736	2.41	1489	2.50
10	1992	746	2.50	781	2.36	1527	2.50
10	1993	776	2.49	804	2.32	1580	2.49
10	1994	761	2.57	821	2.42	1582	2.57
10	1995	735	2.72	828	2.51	1563	2.61
10	1996	871	2.78	848	2.46	1719	2.62
10	1997	797	2.76	890	2.45	1687	2.60
10	1998	841	2.78	934	2.49	1775	2.63
10	1999	874	2.82	926	2.42	1800	2.61
10	2000	905	2.75	1031	2.50	1936	2.76
10	2001	1002	2.69	1112	2.45	2114	2.56
10	2002	1056	2.81	1106	2.50	2162	2.65
10	2003	1079	2.85	1129	2.50	2208	2.67
10	2004	1142	2.89	1022	2.51	2164	2.71
11	1991	678	2.56	706	2.47	1384	2.56
11	1992	674	2.55	674	2.45	1348	2.55
11	1993	677	2.65	672	2.54	1349	2.65
11	1994	682	2.70	694	2.53	1376	2.70
11	1995	682	2.86	710	2.60	1392	2.73
11	1996	599	3.03	705	2.75	1304	2.88
11	1997	771	2.95	702	2.70	1473	2.83
11	1998	696	2.99	755	2.68	1451	2.83
11	1999	710	2.99	790	2.69	1500	2.83
11	2000	793	3.00	789	2.68	1582	2.84
11	2001	927	2.83	1012	2.57	1939	2.70
11	2002	894	2.87	947	2.66	1841	2.76
11	2003	965	2.94	950	2.69	1915	2.82
11	2004	977	2.99	961	2.72	1938	2.86
12	1991	690	2.66	614	2.53	1304	2.66
12	1992	686	2.69	662	2.61	1348	2.69
12	1993	621	2.67	649	2.58	1270	2.67
12	1994	617	2.80	629	2.68	1246	2.80
12	1995	652	2.93	640	2.64	1292	2.78
12	1996	605	3.01	625	2.76	1230	2.88
12	1997	582	3.08	674	2.81	1256	2.94
12	1998	741	3.05	679	2.80	1420	2.93
12	1999	689	3.04	698	2.78	1387	2.91
12	2000	680	3.11	734	2.82	1414	2.95
12	2001	856	2.99	872	2.66	1728	2.82
12	2002	807	2.99	889	2.72	1696	2.85
12	2003	816	2.99	877	2.77	1693	2.87
12	2004	888	3.02	886	2.77	1774	2.89

Gender Gap in GPA at Truman State University, Mo.*Information provided by the Office of the Vice President for Academic Affairs*

1999- 2000	Men	Women
Freshmen	2.84	3.20
Sophomore	2.96	3.13
Junior	2.96	3.20
Senior	3.08	3.29

2000- 2001	Men	Women
Freshmen	2.83	3.24
Sophomore	3.00	3.29
Junior	3.00	3.23
Senior	3.12	3.35

2001 2002	Men	Women
Freshmen	2.89	3.15
Sophomore	2.98	3.19
Junior	3.10	3.32
Senior	3.13	3.39

**SAT Scores (Recentered) and High School
Grade Point Average for Entering First-Year Students by Gender
Fall 1993 - Fall 2004**

Entering Semester	N*	SAT			SAT			SAT			H.S. GPA	
		Mathematics			Verbal			Combined			N*	Mean
		25th	75th	Mean	25th	75th	Mean	25th	75th	Mean		
Fall 1993	3,777	490	600	543	480	600	539	990	1170	1082	-	-
Female	1,880	480	570	522	480	600	539	970	1150	1061	-	-
Male	1,897	520	610	563	480	600	539	1010	1190	1102	-	-
Fall 1994	3,872	490	600	541	480	600	537	990	1170	1078	3,909	2.69
Female	2,008	480	570	522	480	590	536	970	1150	1058	2,034	2.78
Male	1,864	510	610	562	480	600	538	1010	1190	1100	1,875	2.61
Fall 1995	3,821	490	600	550	490	600	545	1000	1180	1095	3,849	2.82
Female	1,925	520	580	531	490	600	545	990	1160	1076	1,937	2.91
Male	1,896	490	620	570	490	600	545	1020	1210	1114	1,912	2.73
Fall 1996	3,953	500	600	552	490	600	547	1010	1190	1099	3,972	2.85
Female	1,944	480	580	531	490	600	545	990	1160	1077	1,960	2.94
Male	2,009	520	630	572	500	600	548	1030	1210	1120	2,012	2.77
Fall 1997	3,710	500	610	557	500	610	551	1020	1200	1108	3,721	3.09
Female	1,981	490	590	538	500	600	548	1000	1170	1086	1,992	3.17
Male	1,729	520	630	578	500	610	555	1040	1230	1132	1,729	2.99
Fall 1998	3,836	510	620	566	500	610	558	1030	1220	1124	3,852	3.16
Female	1,997	490	590	545	500	610	554	1010	1190	1099	2,009	3.23
Male	1,839	530	640	588	510	620	563	1060	1250	1151	1,843	3.08
Fall 1999	4,022	520	620	570	510	620	564	1040	1220	1133	4,050	3.26
Female	2,165	500	600	551	510	610	559	1020	1190	1110	2,183	3.33
Male	1,857	540	650	592	520	620	569	1070	1250	1160	1,867	3.17
Fall 2000	3,695	510	620	569	500	620	558	1030	1230	1127	3,714	3.33
Female	2,057	490	600	548	500	610	553	1010	1200	1102	2,070	3.37
Male	1,638	540	650	595	510	630	565	1060	1270	1159	1,644	3.28
Fall 2001	4,159	510	620	565	500	610	552	1020	1220	1117	4,183	3.35
Female	2,269	500	600	545	490	600	545	1000	1180	1090	2,286	3.40
Male	1,890	530	650	589	500	620	561	1050	1250	1150	1,897	3.29
Fall 2002	3,298	510	630	571	500	620	554	1020	1230	1124	3,322	3.42
Female	1,763	500	610	550	500	610	549	1010	1200	1099	1,783	3.48
Male	1,535	540	650	594	500	620	560	1050	1260	1154	1,539	3.36
Fall 2003	4,022	520	630	576	510	610	561	1050	1230	1137	4,054	3.28
Female	2,024	510	600	555	500	600	553	1020	1200	1107	2,049	3.39
Male	1,998	550	650	598	520	620	570	1090	1250	1167	2,005	3.18
Fall 2004	4,172	520	630	576	510	610	561	1050	1220	1137	4,204	3.29
Female	2,079	500	600	553	500	600	553	1020	1190	1106	2,105	3.37
Male	2,093	550	650	598	520	620	569	1080	1250	1167	2,099	3.22

* Number of students for whom these data were available.

Note A. Effective Fall 1996, the College Board began reporting SAT scores on a new set of scales based on a larger, more diversified reference group

from the 1990's. Recentering reestablishes both the average verbal and math scores near 500, the midpoint of the 200 to 800 scoring scale. This allows verbal and math scores to be compared directly as a measure of the two kinds of skills.

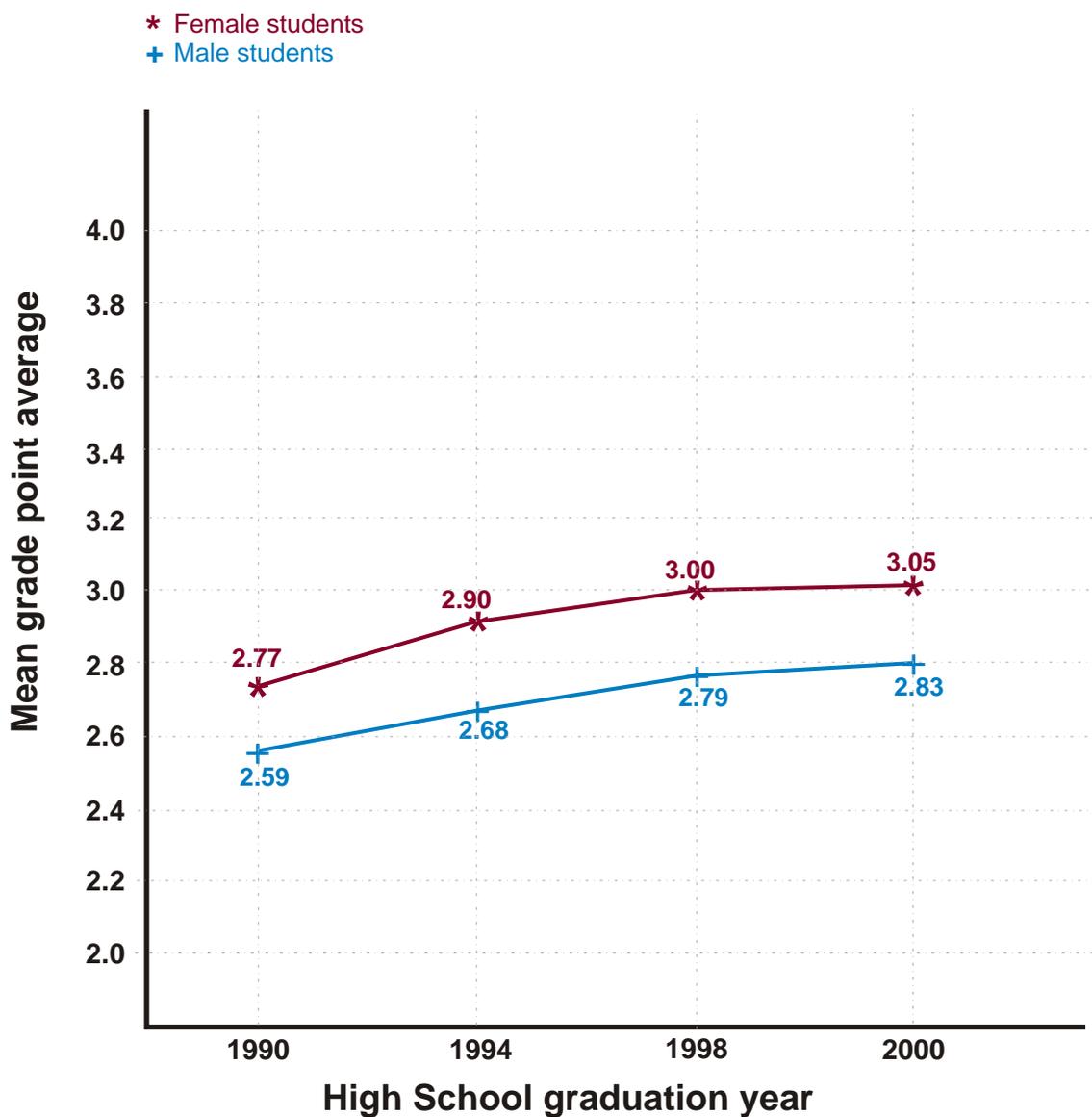
Note B. 25th - 75th percentile represents the range of scores for the middle 50% of students.

Note C. Effective Fall 1997 High School GPA is a weighted average (Honors and Advanced Placement courses are given extra credit), and therefore is not comparable to previous years.

Note D. The numbers pertain to students who were processed through the Office of Undergraduate Admissions, submitted SAT scores, and were enrolled in a credit-bearing course at the end of the 14th calendar day of the semester.

Source: OIR admissions census file, September.

Mean grade point average of high school graduates, by gender



Source: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, High School Transcript Study (HSTS), 2000, 1998, 1994, 1990

Coates and Draves Survey on Late Homework

In September of 2004 Coates and Draves surveyed 200 K-12 teachers about late homework.

The purpose of the survey was to gain further documentation that:

- Boys more than girls turn in homework late;
- That late homework is penalized, thus lowering the homework grade for boys.

It is our contention, and current research demonstrates, that a major source of the GPA gap between boys and girls is that boys often turn in homework late, or not at all.

The reason why boys turn in homework late, or not at all, is neurological in origin. That is, males are challenged by problems they cannot yet solve, but when a problem is not challenging (can be done) it becomes boring and is not worth spending time on.

If a boy can do the homework, he is not challenged and prefers to 'solve' an unsolved problem or challenge.

From our database of 650 K-12 teachers, 200 were chosen by random and surveyed. There is no data on the grade taught nor the geographic location, although email addresses indicate responses from Ohio, Idaho, Canada, Wisconsin, and Oklahoma at a minimum.

The response rate was 12.5%. Normally this is not high enough for a valid statistical survey, but using a commonly accepted statistical formula, the results are valid. Additional surveys could have been sent out, but it was deemed a duplicative activity given the responses.

Q1. Are girls or boys more likely to turn in homework late?

Responses: 84% said boys; 8% said neither; 4% said girls; and 4% said don't know.

Q2. If you answered either Girls or Boys, would turning homework in on time improve (help) their grade?

Responses: 96% said yes; 4% said no.

Conclusion

The survey provides documentation that if boys were not penalized for turning in homework late, their homework scores, grades, and overall GPA would improve.

We have not see any data from schools separating homework scores from test scores. Thus, there is no school data on the GPA impact of penalties for late homework for boys. To get some data on this aspect of the problem, the survey of K-12 teachers provides documentation that:

Boys are more likely to turn in homework late than girls, by a wide margin.

That boys are penalized for late homework, thus lowering their homework scores, grades and overall GPA.

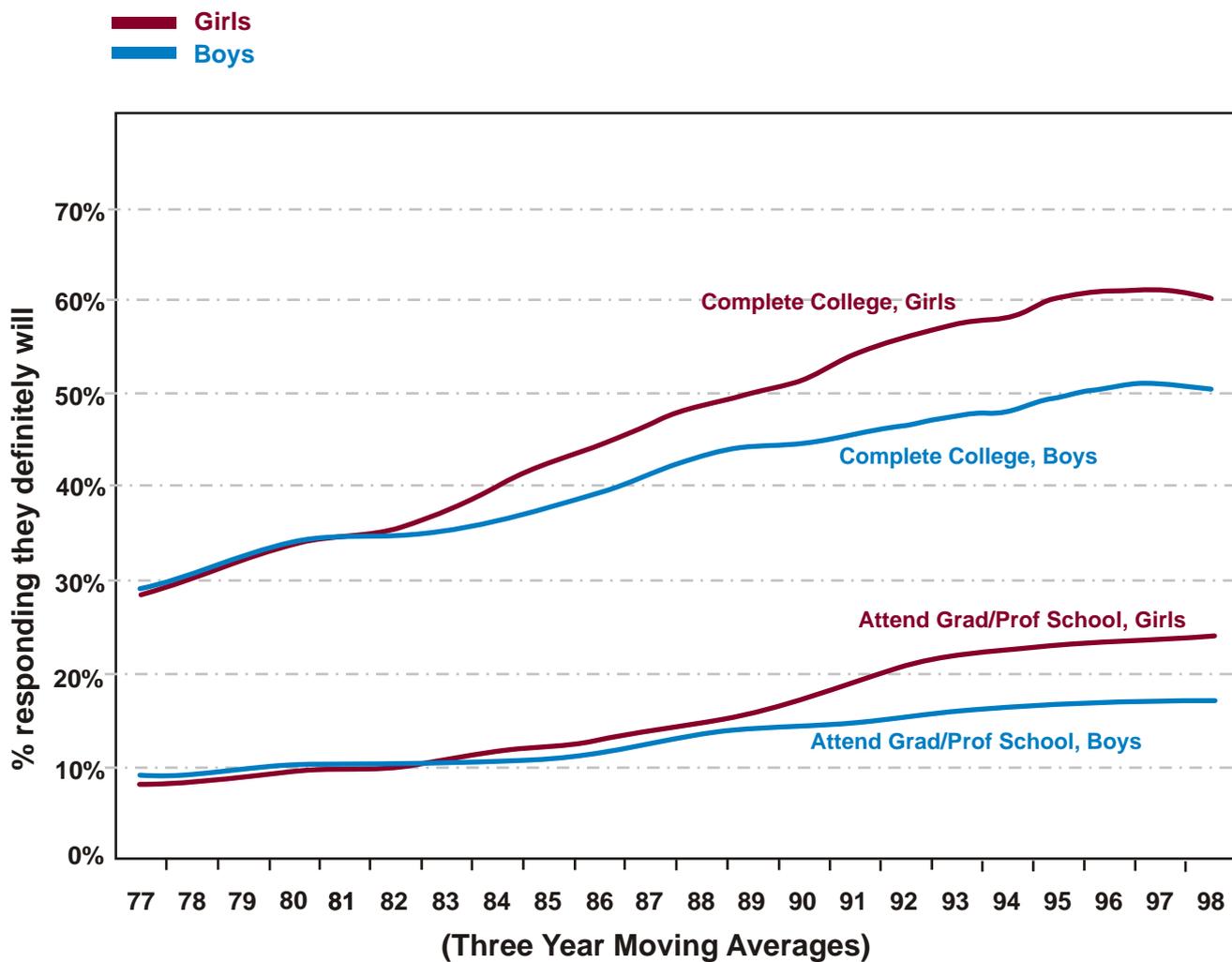
Gender and High School GPA An example of correlational research

	Male	Female
High school GPA Mean Std. Deviation N	3.29 .584 161	3.47 .497 377
When you were in High school, in general, what was the lowest grade that your parents regarded as acceptable Mean Std. Deviation N	2.50 .681 161	2.44 .645 377

Source: Alan E. Marks, Department of Psychology, Oglethorpe University, 2004

http://www.oglethorpe.edu/faculty/~a_marks/Inquiry%20101/Gender%20and%20High%20and%20

High School Seniors' Educational Expectations by Gender, 1976-1999



Source: Monitoring the Future Survey

Ruling Out Other Explanations

Boys are not as intelligent as girls.

Fortunately no one has seriously posed this as an explanation.

Parents are not raising their boys with good academic habits.

Boys get lower GPAs even when their sisters do well in school. Why parents would raise good girls and bad boys is not explained by the proponents of this theory.

There is no documentation on what, precisely, parents do wrongly in raising boys. There is no documentation that parents do anything wrong in raising boys.

The problem is because of participation of minority and low-income students.

First of all, the problem exists in societies where there are few minority students, such as Finland and New Zealand. Second, the problem exists among high income white families. Since white students account for the large majority of entering college freshmen each year, minority participation in schools would not account for this.

The problem lies in recent social problems in families.

The issue exists in two-parent traditional families. No study indicates that there is a gender difference with students from single parent families. If this had merit, girls from single parent families would be similarly affected.

Boys today behave badly.

All of the studies indicate that boys behave better today than boys in previous generations. The crime rate is down, drug use is down, pregnancy is down.

There are no consistent reports of bad behavior on the part of boys in the workplace.

Boys are lazy and unmotivated.

Boys are not lazy and unmotivated in the workplace. When the same boys leave school, they are not lazy nor unmotivated at jobs.

Boys just want to play.

This is true. But it has always been true. And “play” is seen by the best educators as preparation for life. There is no documentation that boys today want to play any more than their great great grandfathers 100 years ago.

We need to raise boys like we raise girls.

Boys' behavior is different than girls' behavior beginning in the womb. It has not been stated what mothers do differently with their unborn boys. The only explanation proposed is that boys' behavior in the womb is due to genetic gender differences, not any problem with mothers.

Boys need more verbal skills.

Females have better verbal skills than males, due to neurology, but that has always been the case, even when boys were a majority of college students and doing equal to better than girls in school. The data from the Univ. of Mass. Indicates that even when boys score higher on verbal SATs than girls, their GPA is still lower.

References for Smart Boys, Bad Grades

- (1) "Where the boys aren't," by Brendan I. Koerner, U.S. News, February 8, 1999.
- (2) Degrees conferred by institutions of higher education, by level of degree and Sex of student, 1949-50 to 1993-94, National Center for Education Statistics, Earned Degrees Conferred.
- (3) Males' learning needs ignored? By Doug Carroll, The Arizona Republic, November 1, 2004, page B3.
- (4) Boys and Girls Learn Differently! By Michael Gurian, Jossey-Bass, San Francisco, 2001.
- (5) The High School Transcript Study, US Department of Education, 2004, page 3-7.
- (6) If we take the difference between the average GPA for girls and boys, the percentage is about 6%. But this does not fairly represent the difference, because most scores are clustered around the mean for both sexes. In addition, the percentage is based on a 1.0 4.0 scale, not a 100% scale.

North Carolina State University math instructor Laura Taylor suggests a graph with two overlapping bell curves to better demonstrate the significance of the gap.
- (7) "Improving Boys' and Girls' Academic Achievement," Conseil Superier de L'Education, Government of Quebec, Canada
- (8) The Trouble with Boys, The Guardian, August 21, 2000.
- (9) The Achievement of Boys, Winter 1999; and Promoting Boys' Achievement, Education Review Office, Education Ministry, Government of New Zealand.
- (10) An Overview of Course Completion in Ireland, Mark Morgan, Educational Research Centre, St. Patrick's College, Dublin, 2001.
<http://www.ucc.ie/ucc/units/equality/Conferences/Maturestudents2001/markmorgan.htm>
- (11) The Education of Boys, Department of Education, Training and Youth Affairs, Australian Government, August 2000.
- (12) In secondary school in the United Kingdom, 74% of those excluded in the third year were boys. BBC Story, Education, August 16, 2004.
- (13) Virginia Woolf wrote "Children never forget." The oldest 'boy' we interviewed was Landon Divers, age 102. When he was a senior in high school, he was the only student to pass the physics exam. However, he did not turn in the text workbook, as he explained he did not need it for the course. The teacher gave passing grades to all the other students who had failed the course, and flunked Mr. Divers. Because he was a senior, he had to take the entire senior year over again. It was clear in our interview that this wasted year still hurt him after 80+ years.

- (14) Interviews with faculty who do not penalize students for turning in homework late indicate there are no problems with the policy. Sissy Copeland of Piedmont Technical College has had this policy for several years without any problems. Bruce Jones of West Georgia College reported only one student out of 43 had academic problems with the no-penalty for late homework policy. Carol Ann Baily of Middle Tennessee State University provides bonus points for homework turned in on time, but does not penalize a student for late work. Robert O. Phillips of Eastern New Mexico University reports that students turn in homework in the same time pattern when there is no penalty as when there were late penalties. That is, most students turned in homework on time even when there was no penalty for late work.
- (15) Students question degree gender gap, BBC News, February 12, 2003, <http://news.bbc.co.uk/1/hi/education/2750787.stm>
- (16) By grade 12, for example, the percentage of males who don't do homework is 13.2% and the percentage of girls is just 3.1, U.S. Department of Education 1998 figures quoted in Sommers, page 29.
- (17) A literature search found only one reference to the difference between work turned in on time, and that citation said that girls were equal to boys in work timeliness. Interviews were also conducted by the authors with executives of an Illinois human resources association and a Wisconsin human resources association. Both executives knew of no gender related problem in the workplace with boys. According to the owner and founder of a national employment agency and Kelly Girl temporary help, John Willetts of Fox Point, Wisconsin, over the course of several decades of observing young men and young women in the workplace, he cites no significant difference between the punctuality and on-time performance between young men and young women.
- (18) Authors' conversation with educator Wendy Novak, Winona, Minnesota.
- (19) United States Congress, House Committee on the Judiciary, March 28, 1924. Child Labor, compiled by Julia E. Johnsen, HW Wilson Company, New York, 1924, page 145.
- (20) Nine Shift: Work, life and education in the 21st Century, by William A. Draves and Julie Coates, Learning Resources Network (LERN), River Falls, WI, pages 225 - 227.
- (21) "The Myth That Schools ShortChange Girls: Social Science in the Service of Deception," Dr. Judith Kleinfeld, University of Alaska, Fairbanks, 1998.
- (22) "Nancy Cole, president of the Educational Testing Service, terms it the spread phenomenon: On almost any intelligence or achievement test, male scores are more spread out than female scores at the extremes of ability and disability...." The War Against Boys, by Christina Hoff Sommers, Simon & Schuster, 2000, page 32.

About the Authors

Julie Coates is Vice President for Information Services at the **Learning Resources Network (LERN)**, a national education association.

She is one of the foremost authorities in the world on generational learning styles, and teaches an online course on the subject for teachers and faculty as part of the graduate program with the University of South Dakota.



Julie Coates

Ms. Coates attended Cornell University, North Carolina State University, and pursued graduate study in public administration and adult education at Kansas State University, from which she earned her Masters Degree.

She has been interviewed by the BBC, New York Times and other media, has done conference keynotes and seminars in Russia, Germany, Australia, Mexico, Canada and throughout the United States. She was invited to present her work at Vassar.

Julie has worked with more than 20 boys, including low-income, minority, and at-risk boys. Born in 1946, she is the first citation if one googles “world's oldest baby boomer.” She has had three sons, including a Gen Xer, Gen Y son, and African-American foster son.



William A. Draves, CAE, is an internationally recognized teacher, author and consultant and President of **LERN**.

He is one of the most quoted experts on lifelong learning and online learning by the U.S. media, having been interviewed by The New York Times, Los Angeles Times, Washington Post, Wall Street Journal, National Public Radio, NBC Nightly News and Wired.com.

William A. Draves

Draves holds a master's degree in adult education from The George Washington University in Washington, DC. He has authored six books, including “Teaching Online” and “How to Teach Adults,” which has sold more than 100,000 copies. He has taught more than 5,000 faculty on how to teach online, and hundreds of elementary and secondary school teachers about using the web in the classroom.

Draves and Coates are co-authors of *Nine Shift: Work, life and education in the 21st Century*. Among the many positive reviews, BBC Global Business reporter Peter Day flew to Wisconsin to interview Draves and Coates, calling the book “Fascinating.” Educators in at least six countries have ordered the book. The book web site is <http://www.NineShift.com> and the Nine Shift Weblog is at <http://nineshift.typepad.com>

Speaking and Seminars

The authors are available for speaking engagements, including conference keynotes, faculty development seminars, and media interviews.

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More information available at:
www.SmartBoysBadGrades.com
www.LERN.org

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New! Smart boys, bad grades

Why boys get worse grades than girls and are only 35% of graduates in higher education

Finally, answers to one of the biggest crises in education today.

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What to do:

1. Read the report thoroughly to understand this important issue. The answers are summarized on page 6.
2. Tell others about this issue and the answers.
3. Send the authors any data you have about the issue.

Follow up action:

- Parents, go to www.SmartBoysBadGrades.com for free tips on how to advocate and support your son.
- Teachers, go to www.SmartBoysBadGrades.com to get a complimentary copy of the Top 20 Tips for teachers in helping boys learn.
- Schools and colleges should contact the authors about seminars for faculty and administrators.
- Media contact the authors for an interview.

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- By -

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