#### **Council for American Private Education**

# CAPE OUTOOK Voice of America's private schools

### **Private Schools and the High School Transcript Study**

Who says American students are slacking off? Between 1990 and 2000, private and public high school graduates increased their grade point average in spite of taking a heavier course load. Their grade point average (GPA) jumped from 2.68 to 2.94, while the number of course credits they earned rose from 23.6 to 26.2, according to a federal study of high school transcripts

The study also found that, compared to the national average, private high school students took more challenging courses in math and science and reached higher levels of achievement on national tests.

The 2000 High School Transcript Study (HSTS) examined the transcripts of 19,747 public school students and 1,184 private school students in order to provide a comprehensive look at the high school curriculum and the relationship between the courses that students take and their academic achievement. The National Center for Education Statistics (NCES) sponsored the 2000 study as well as similar studies conducted in 1990, 1994, and 1998. The series allows for comparisons and the detection of decade-long trends. The 2000 study will eventually be documented in three publications, including a summary report released last month. "Transcript studies serve as a barometer for changes in high school student coursetaking patterns, which, in combination with school course offerings, provide valuable information about the rigor of high school curricula across the nation," the report states.

#### **Course Credits**

Private high school graduates in 2000 earned, on average, 26.4 course credits, up from 24.7 in 1990; public school students earned a mean 26.2 credits in 2000, compared to 23.5 credits 10 years earlier.

Besides looking at course-taking behav-

iors within types of school, the 2000 HSTS examined such behaviors by gen-

der, race/ethnicity, and region of the country. Female high school graduates in 2000 took a heavier course load (26.3) than male graduates (26.0) and also took more core courses (English, social studies, mathematics, and science). White students took more course credits than blacks, Hispanics, or Asians. Students in the South took more credits than those in the Northeast. Midwest. or West. Most important, the overall trend for all groups between 1990 and 2000 was

upward. As the report put it, "Each examined student and school subgroup student gender, student race/ethnicity, school type, and region of the country increased the number of course credits they earned."

As for types of courses taken, high school graduates in 2000 earned more course credits in English (4.3) than in any other subject. The next most popular core course was social studies (3.9), followed by mathematics (3.7), and science (3.2).

Some students took on the added challenge of Advanced Placement (AP) and International Baccalaureate (IB) courses. The summary report focused on AP/IB mathematics and science. In 2000, 9.5 percent of high school graduates had accumulated credits in AP or IB math courses, and approximately 9.1 percent had done so in AP or IB science courses. Delving into the data by type of school, 13.5 percent of private school students had earned AP or IB math credits, compared to 9.2 percent of public school students. The pattern for science was similar, with 12.8 percent of private school students accumulating AP/IB science credits,

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compared to 8.8 percent of public school students.

Sharif M. Shakrani, deputy executive director of the National Assessment Governing Board, unpacked some HSTS data at a national workshop last month. His analysis showed, among other things, that students in private schools tended to take tougher courses than students in public schools. Among graduates in the year 2000, 66 percent of private school students and 56 percent of public school students

had second-year algebra as their highest math course in high school, while 18 percent of private school students and 12 percent of public school students had calculus as their highest math course. Similarly, private school students took more demanding courses in science. Forty-two percent of private school students took chemistry as their highest science course, compared to 35 percent of public school students, while 50 percent of private school students and 34 percent of public school students took physics as their highest science course.

By mining the HSTS data, Shakrani also found that only 49 percent of all graduates in the year 2000 took any science course during their senior year and only 62 percent took any mathematics course. But again the figures were different for private schools, where 59 percent of seniors took a science course (10 points above the national average) and 82 percent took a mathematics course (20 points above the average).

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a coalition of national associations serving private schools K-12 Executive Director: Joe McTighe

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#### Continued from page 1 Academic Performance

In the realm of common sense, course-taking patterns are related to academic performance. Indeed, in the realm of common sense they are causally related: more rigorous courses produce more proficient performance. But in the world

#### % of Graduates in 2000 Whose Highest Math Course Was...

Private Public Schools Schools						
Below Algebra I	1		8			
Algebra I	1		7			
Geometry	14		17			
Algebra II	66		56			
Calculus	18		12			

of statistics, a relationship between two variables does not necessarily imply causation. Indeed, both variables might be "caused" by some entirely different factor. So, statistically speaking, the HSTS data do not demonstrate that exposure to tougher courses in private schools accounts for higher performance. Still, there exists the more demanding course work in private schools, and there exists the higher performance.

The HSTS summary report focused on the math and science performance of students who participated in the National Assessment of Educational Progress (NAEP) in 12th grade. According to the report, private high school graduates in 2000 "achieved a mean 318 mathematics assessment score (out of a possible 500 points), compared to the mean 300 mathematics assessment score achieved by public high school graduates." In science, private high school graduates scored 163 (out of a possible 300 points), compared to a score of 146 attained by their public school peers.

As might be expected, students who completed AP or IB courses in mathematics did better on the NAEP math assessment (345) than those who did not take such courses (297). The same relationship held true for science, with AP/ IB course takers in science scoring higher on the NAEP science assessment (179) than non-AB/IB students (144). When looked at by school type, private school AP/IB math students scored 348, compared to the 345 score obtained by public school AP/IB students. And in science, private school students who took AP or IB science credits scored 188, compared to the 178 score of their public school counterparts.

The summary report also looks at NAEP scores of students who had completed other levels of course work in science and math. Not surprisingly, students who took harder courses achieved higher scores. For example, graduates of the class of 2000 whose highest math course in high school was second-year algebra scored 304 (315 private school), while students whose highest math course was calculus scored 342 (337 private school). Likewise, students with chemistry listed as the highest science course on their transcripts scored 148 (160 private school) on the NAEP science assessment, while students who managed to take physics as their highest science course scored 164 (171 private school).

The report also noted that graduates in the 2000 HSTS who took math courses during the 12<sup>th</sup> grade scored higher on 12<sup>th</sup> grade NAEP math tests than students whose terminal math course was at a lower grade. The same pattern held true for science. Thus, students whose last math course was taken in 12<sup>th</sup> grade had a NAEP math score of 307 (320 private school), while those who only took math up to 11<sup>th</sup> grade had a NAEP math score of 293 (313 private school). And in science, students who took a 12<sup>th</sup> grade science course scored 157 (170 private school) on the NAEP science test, while those who stopped taking science after 11<sup>th</sup> grade scored 142 (157 private).

Summing up the relationship between curriculum and achievement, the report states,

#### % of Graduates in 2000 Whose Highest Science Course Was...

	Private Public Schools Schools				
Below Biology		0		5	
Biology		8		27	
Chemistry		42		35	
Physics		50		34	

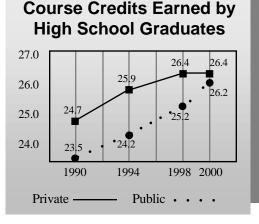
"The mean NAEP mathematics and science assessment scores achieved by the HSTS 2000 high school graduates revealed that graduates taking higher level mathematics and science courses and/or at the higher grade levels generally scored higher on the NAEP assessments."

#### Grade Point Average

Consistent with their higher achievement on Continued on page 3

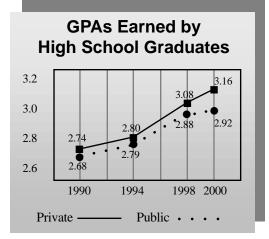
#### Continued from page 2

national tests, private secondary school graduates in 2000 earned higher grade point averages than public school graduates. Between 1990 and 2000, GPAs rose for all high school graduates from 2.68 to 2.94, but the trend line for



private school students differed from that for public school students. Both groups started out with roughly similar mean GPAs in 1990 (2.74 private and 2.68 public), but during the decade the private school GPA rose 0.42 points to 3.16, while the GPA for public schools climbed 0.24 points to 2.92. The HSTS summary says a number of factors may have contributed to the overall increase in GPA, including an increase in academic achievement during the 1990s, changes in teachers' grading standards, or adjustments in the subject matter being taught.

To shed further light on the GPA increase



during the 1990s, the summary report analyzed data by gender and school type. It turns out that private school female graduates earned the highest overall GPA in both 1990 and 2000 and also posted the highest GPA increase during the decade. Between 1990 and 2000, their GPAs jumped 0.40 points from 2.86 to 3.26,

while the GPAs of male private school graduates rose 0.35 points from 2.62 to 2.97. For public school students, female GPAs went up 0.26 points from 2.76 to 3.02, and male GPAs increased 0.24 points from to 2.58 to 2.82.

Are women smarter than men? If grades in high school are any indication, the answer is yes. Female high school graduates in 2000 had higher average GPAs (3.05) than males (2.83), and their GPA superiority was consistent throughout the 1990s.

The HSTS data revealed some other interesting facts related to GPA:

• Math and science courses proved the most challenging for high school students. Mean GPAs in those subjects were lower for 2000 graduates than mean GPAs in any of the other 14 course subjects identified in the study.

• Students drawn toward tougher courses, specifically AP or IB courses in mathematics or science, tended to get higher GPAs. As the report put it, "In 2000, high school graduates who

#### 12th Grade NAEP Scores for Graduates in 2000

	Private Schools	Public Schools
Mathematics	318	300
Science	163	146

Note: Math scale is 1 to 500; science scale is 1 to 300.

took AP or IB courses in both mathematics and science attained an overall mean GPA of 3.61," whereas the GPA of students who did not take AP or IB courses in either math or science was 2.85.

 $\bullet$  The high school year during which students earned their highest GPA was  $12^{th}$  grade.

By way of summary, the report had this to say: "Across the nation's secondary schools, from 1990 to 2000, students earned more credits and higher GPAs. The HSTS 2000 also provided some insight into results of the NAEP 2000 mathematics and science assessments—among other things, scores were related to factors such as GPA in mathematics and science courses, AP and IB course taking, highest level of courses taken in mathematics and science, and the last year in which mathematics and science courses were taken."

More information about the 2000 High School Transcript Study is available on the NCES Web site at http://nces.ed.gov/ nationsreportcard/hsts/results/.

#### DC Choice Program Underway

The Washington Scholarship Fund (WSF) has been through a six-week whirlwind. Selected on March 24 to administer the nation's first federally funded K-12 choice program, the agency has initiated a full-court press to sign up parents and schools for the September start-up.

WSF held four days of orientation meetings for interested families at the Washington Convention Center in late April and continued the application sessions in DC neighborhoods in early May. A separate session was set up for school officials on April 20 to explain how the program will work. DC Mayor Anthony Williams and U.S. Education Secretary Rod Paige were on hand to spell out the significance of the undertaking and to offer words of gratitude and encouragement.

WSF also published a 15-page Q-and-A document addressing the details involved in private school participation. The document deals with issues such as testing requirements, admissions standards, and the operation of the lottery. On the issue of standardized testing, for example, WSF clarified that although scholarship students will have to take the same tests as students in the DC public schools, those tests will be not be administered by the school, but by the program's evaluators at a location other than the school.

By all indications, officials at the WSF, the mayor's office, and the USDE have listened to and responded to the concerns of schools and families and, despite an extraordinarily tight timeframe, have made every attempt to make the program as friendly as possible for all involved.

The Q-and-A document for private schools and additional information about the DC choice initiative are available at: http://www.dcscholarship.org/



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## **CAPEnotes**

★ Independent schools provide value for the investment and offer values for a lifetime. That's the message of a new study by the National Association of Independent Schools entitled Values Added: The Lifelong Returns of an Independent School Education.

Extracting data from the National Education Longitudinal Study, which between 1988 and 2000 tracked a cohort of 8<sup>th</sup> grade students through high school, college, and the early stages of careers, the report shows that independent schools prepare students "not just for this year's tests, but for all of life's tests." The data show, for example that independent school students have above-average levels of success in acquiring a college degree, set strong professional goals, are highly satisfied with their jobs, and place high value on community service and civic participation.

According to the report, independent schools "understand that the best education is a values-added experience that provides a structured, nurturing environment where young people learn not only reading, math, and science, but also the importance of hard work, leadership, personal responsibility, and good citizenship."

The report is available online in PDF format at the following address: http:// www.nais.org/docs/pdf/NELSReport\_2-3-04\_FINAL.pdf.

 $\star$  CAPE continues to grow. Our newest member is the Oral Roberts University Educational Fellowship (ORUEF), which, according to its statement of purpose, is "a religious, nonprofit organization of Charismatically open Christian schools." ORUEF was founded in 1983 "as a professional service organization to provide networking opportunities and support services for Christian preschools/elementary/secondary schools, and Bible schools."

With a network of schools that serve more than 36,000 K-12 students in the United States, ORUEF "seeks to instill within member schools an enthusiasm to be responsible and reputable leaders in the field of education—professionally, academically, and spiritually." Another goal is to help Christian schools become stronger while increasing camaraderie among Christian school leaders, teachers, and staff.

The many services that ORUEF provides member schools include "a National Christian Honor Student Association, legal referral, assistance in curriculum development, new school seminars, and the National Christian High School Finals Competition. Each May ORUEF sponsors on the ORU campus, a national Christian high school competition with approximately 1,500 students competing in over 140 events, including art, music, drama, speech, debate, academics, athletics, and cheerleading."



 ★ Teachers who serve in schools serving low-income students and those who teach in certain subject-matter shortage areas might be eligible to have their college loans deferred or forgiven. Information about loan cancellations and deferments under the federal Perkins and Stafford loan programs—including FFEL

Stafford loans, direct subsidized and unsubsidized loans, and even some consolidated loans—is available on the Web at: http://studentaid.ed.gov/PORTALS WebApp/students/english/teachercancel.jsp?tab=repaying.

For certain loan benefits, teachers must be employed full-time at schools where more than 30 percent of the students enrolled are from low-income families. Such schools must also be listed on the U.S. Department of Education's list of eligible schools (http://bcolp01.ed.gov/CFAPPS/ FSA/tcli/2003/searchpage.cfm). If you believe your school qualifies but is not listed, you need to contact the appropriate official at your state education department (a list of such officials is available at http:// /www.ed.gov/offices/OSFAP/Students/repayment/teachers/stcol.html#N). If you're still not successful, contact CAPE. Private school leaders recently received assurance from high-ranking officials at the U.S. Department of Education that they are committed to ensuring that the eligibility list includes all qualifying schools.