Texas students earn second highest score in nation on science NAEP

According to test results released by the National Assessment of Educational Progress (NAEP), every major ethnic group in Texas scored higher on the redesigned eighth-grade NAEP science test than did their peers nationally, and white students earned the second-highest score in the country.

Only eighth-grade students attending the Department of Defense schools, who earned an average scale score of 170, scored higher on the exam than Texas’ white students who tied with white students in Massachusetts with the second highest score of 167.

The 2009 NAEP science assessment is based on a new framework that keeps content current with key developments in science, curriculum standards, assessments and research. Therefore, the 2009 scores cannot be compared to previous NAEP scores.

Both the fourth and eighth-grade tests cover three broad areas – physical science, life science, and earth and space sciences. The score range for each assessment is 0-300.

The Texas eighth grade scores are considered by NAEP to be statistically higher than the national average except for the scores for the all students category.

“While we still have room for improvement, Texas students fared well when compared to student groups nationally. In recent years, Texas has worked to improve science instruction through its focus on Science, Technology, Mathematics and Engineering (STEM) programs. We have also made a concerted effort to focus on science education through state policy, standards and assessment. I think we are beginning to see results from those efforts,” said Commissioner of Education Robert Scott.

Texas’ fourth-grade students posted results similar to the eighth-grade scores, with white students receiving the third highest average scale scores in the country at 168. Students in Virginia earned the top spot with an average scale score of 172, followed by Massachusetts at 169.

Only African-American students in Virginia and at the Department of Defense schools, who earned average scores of 141, scored higher than Texas students. African-American students in Texas and Maine earned an average scale score of 139.

Statistically, the Texas scores differed significantly from the national public school scores for all groups except Asian American and the all students category.

About 6,300 Texas fourth-grade students and 5,900 Texas eighth-grade students took the NAEP science test. Schools are selected to participate in NAEP through a stratified random sampling process, with the intention of mirroring Texas’ demographics.

See charts above for eighth- and fourth-grade scale scores.
State Board of Education members took a step toward helping with the state’s budget situation this month when they voted to accept revised pricing submitted by publishers for new instructional material called for in Proclamation 2011.

Board members also got a first look at publishers who have filed intents to bid on supplemental science instructional materials.

Proclamation 2011 includes Prekindergarten Systems; English Language Arts, grades 2-8; Spanish Language Arts, grades 2-5; English as a Second Language, grades K-8; Handwriting, grades 1-3; Spelling, grades 1-6; and English, I-IV. The lower bids could save the state $30 million, bringing the total price tag to about $460 million for Proclamation 2011.

Although Proclamation 2011 called for bids for new material for speech and Spanish Language Arts, grade 6, no bids were received for those areas so they have been deleted from the list.

The board also directed that the commissioner of education negotiate with publishers on the Proclamation 2011 materials where there are both an online and printed version of the materials to achieve a better price.

**Science**

Due to budget concerns, the board chose not to issue a full Proclamation 2012 for the science materials. Instead the members approved a request for materials that cover the new science Texas Essential Knowledge and Skills for the high school and grades 5-8 to help students prepare for the new State of Texas Assessment of Academic Skills (STAAR™) test.

The instructional materials for the high school courses include biology, chemistry, physics, and Integrated Physics and Chemistry (IPC).

Board members got a first look at who was interested in bidding on the supplemental science instructional materials.

A total of 108 student and teachers materials are possible for supplemental science materials for high school biology, chemistry, physics and (IPC).

At the middle school level, 146 products are possible for bid for grades 5-8.

The request for supplemental science instructional materials was issued in May 2010 for the high school courses. In November, the board added grades 5-8 to the call. The supplemental materials, which will only be available in electronic format, are expected to cost about $60 million.

Publishers must submit samples of the new science materials by April 29, and the review of the texts is scheduled to occur in June 2011. Adoption of the new materials is scheduled for July 2011; and materials are scheduled to be available for schools in August.

To further assist with the purchase of the new instructional materials, the board voted in November to provide the state budget with $1.9 billion over the next biennium from the proceeds of the Permanent School Fund and through assistance from the General Land Office’s management of the PSF’s land and mineral holdings.

The money from the PSF, which flows through the Available School Fund, is required to be spent on textbooks and educational programs.

When combined with the payments for the current biennium, the fund will have provided $3.05 billion during the four-year period.

With much discussion about the cost and availability of textbooks and other instructional materials, it’s likely that a bevy of legislation will be proposed this session. To date, the following textbook-related bills have been filed:


**HB 881** (Rep. Roberto Alonzo): Relating to abolishing the State Board of Education and transferring the functions of the board to the Texas Education Agency and the commissioner of education.

**SB 391** (Sen. Dan Patrick): Relating to the provision of electronic sample copies of a textbook adopted by the State Board of Education.
TOPNOTCH TEACHERS

Board honors math, science finalists for Presidential teaching award

The State Board of Education honored the Texas finalists of the Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST) at its Jan. 21 meeting in Austin.

The Presidential Awards for Excellence in Mathematics and Science Teaching is the highest recognition that a math or science teacher may receive for exemplary teaching in the United States.

The Awards recognize outstanding K-12 teachers for their contributions in the classroom and to their profession.

The 2010 Awards program recognized kindergarten through sixth grade math and science teachers in each state and the four U.S. jurisdictions whose innovative methods bring teaching to life in the classroom.

Through state selection committees, three math and three science finalists were nominated as Texas finalists.

The Texas finalists for the Presidential Awards for Excellence in Mathematics and Science Teaching for mathematics are:

- Lorene Wallace, Bryker Woods Elementary, Austin ISD;
- Stephanie Weaver, Shadycrest Elementary, Pearland ISD; and
- Elizabeth Hudgins, Eanes Elementary, Eanes ISD.

The Texas science finalists are:

- Nancy Douglas, Andrews Elementary School, Austin ISD;
- Kenton Page, Carnahan Elementary School, Northside ISD; and
- Martha McLeod, Fulton 4-5 Learning Center, Aransas County ISD.

A national selection committee will choose one Texas math finalist and one Texas science finalist. In early summer, the White House will announce the official PAEMST recipients. These educators will receive their awards in Washington, D.C. later this year.

Each PAEMST awardee receives a citation signed by the President of the United States, a $10,000 award from the National Science Foundation, and gifts from a broad range of donors. Awardees and their guests are honored during events that take place in Washington, DC. These events include an award ceremony, celebratory receptions, professional development programs, and discussions with policy-makers on how to improve mathematics and science education.

Since 1983, more than 4,000 teachers have been recognized for their contributions to mathematics and science education.

The 2011 PAEMST Awards will honor math and science teachers working in grades 7-12. For more information, visit the website www.paemst.org.
HB 3 Transition Plan

New state assessment program to begin in the 2011-2012 school year

The more rigorous State of Texas Assessments of Academic Readiness (STAAR™) program will begin in the 2011-2012 school year. The new test design for STAAR™ will focus on readiness for success in the next grade or courses, and ultimately for college and career.

The rigor of items will be increased by assessing skills at a greater depth and level of cognitive complexity. In this way, the tests will better measure the growth of higher-achieving students.

Students in grades 3 through 8 will take the following assessments:

- mathematics and reading at grades 3–8;
- writing at grades 4 and 7;
- science at grade 5;
- science and social studies at grade 8;
- Spanish versions of mathematics and reading at grades 3–5, writing at grade 4, and science at grade 5.

With the implementation of STAAR™, testing requirements for graduation will significantly increase. While the TAKS represented four hurdles for students, requiring them to pass English language arts, mathematics, science, and social studies tests, STAAR™ represents 12 hurdles. The STAAR™ End-of-Course (EOC) assessments include:

- English I, II, and III;
- Algebra I, II, and geometry;
- biology, chemistry and physics;
- world geography, world history, and U.S. history.

Graduation Requirements

Students entering the ninth grade in the 2011-2012 school year will be the first group required to take the STAAR™ EOC exams for graduation. The student’s graduation program determines which assessments the student will take and how well the student must perform on those assessments. The testing requirements are based on the three graduation programs.

Students on the Minimum High School Program (MHSP) must achieve the cumulative score requirement based on the number of courses taken for which an EOC assessment exists. Students on the Recommended High School Program (RHSP) must meet the satisfactory performance standard on the Algebra II and English III assessments, in addition to the cumulative score requirements for the four core content areas. For the Distinguished Achievement Program (DAP), students must meet the college readiness performance standard on the Algebra II and English III assessments, in addition to the cumulative score requirements.

Students graduating under STAAR™ must achieve a cumulative score that is at least equal to the number of End-of-Course assessments taken in each foundation content area and a satisfactory scale score. In addition, the end-of-course assessments will account for 15 percent of a student’s final grade in the course.

If a student does not achieve the minimum score on the EOC assessment and must retake the exam, the school district is not required to use the student’s score on subsequent administrations to determine the student’s final grade for that course. A student graduating under TAKS and enrolled in a course with an End-of-Course exam is not required to take the state assessment; however, the school district could require a student graduating under TAKS to take the EOC as a final exam requirement.

Setting the Standards

STAAR™ performance standards will be set to require a higher level of student performance than is required on the current TAKS tests.

Performance standards for the EOC exams will be set in February 2012 and reports will be made available in early June 2012 after the May 2012 administration. The standards for grades 3-8 will be set in fall 2012 and reports for those grades will be delayed until later that fall.

Each general grade 3-8 and EOC STAAR™ assessment will have a satisfactory cut score and an advanced cut score. It is anticipated that the satisfactory performance standards will be phased in over several years, as has occurred with previous state tests.

There will also be EOC minimum scores, set below but within a reasonable range of the satisfactory scores, which will be used to determine whether a student’s score on a particular EOC assessment may count towards his or her cumulative score in that content area.

Performance at the highest cut score will be interpreted differently depending on the assessment. For example, the highest cut will indicate college readiness for Algebra II and English III. It will indicate advanced course readiness for Algebra I, English I, and English II, and it will indicate advanced performance for the remaining courses.

◆HB 3 Transition continued
Other notable differences between the STAAR™ and TAKS:

- STAAR™ EOC exams will be offered online and in paper format. The assessments for grades 3-8 will be administered on paper only.

- Due to the length of the new STAAR™ tests and the desire to embed field-test items to eliminate stand-alone field testing, each of the English EOC assessments will be administered over two days. All other EOC assessments will be administered on one day.

- The test design for English I, II, and III will require students to write two essays rather than the one that TAKS required. The test design will also allow for the reading and writing components to be calibrated, equated, and scaled separately so that the scores on the reading and writing components can be reported separately. This will allow a student to retake only the portion of the English EOC assessment on which he or she did not meet the minimum score requirements.

- In science and mathematics, the number of open-ended (griddable) items on most tests will increase to allow students more opportunity to derive an answer independently without being influenced by answer choices provided with the questions.

- To validate the level of rigor, student performance on STAAR™ assessments will be compared with results on standardized national and international assessments.

More information about the transition from TAKS to STAAR™ can be found on the Texas Education Agency’s website at [http://www.tea.state.tx.us/student.assessment/hb3plan/](http://www.tea.state.tx.us/student.assessment/hb3plan/).

Key testing dates are available at [http://www.tea.state.tx.us/student.assessment/calendars/](http://www.tea.state.tx.us/student.assessment/calendars/). Please note that the calendar is subject to change.
State Board Actions

The State Board of Education met January 19 and 21 and took the following actions.

**FIRST READING**

At first reading and filing authorization, the board:

- Approved the repeal of rules dealing with the allotment for Gifted/Talented Education. The percent of that allotment that may be spent on indirect costs was changed by law and the new percent is referenced in Chapter 105 of the Texas Administrative Code. In order to avoid confusion, the board voted to repeal the reference to the old percent in Chapter 89.

**SECOND READING**

At second reading and final adoption, the board:

- Approved a new mathematics course called Advanced Quantitative Reasoning that can be used to satisfy the fourth math credit graduation requirement. The course would be available for use in Texas classrooms in the 2011-2012 school year.

**IN OTHER ACTION**

In other action, the board:

- Amended and adopted the board’s rules of procedures. Per their operating rules, the board officers announced the following committee assignments. At each committee meeting a chair was elected and a vice chair appointed:

  **Committee on Instruction:**
  Barbara Cargill, Chair
  Terri Leo, Vice Chair
  Mary Helen Berlanga
  George Clayton
  Marsha Farney

  **Committee on School Finance/Permanent School Fund:**
  Patricia Hardy, Chair
  Lawrence A. Allen, Jr.
  David Bradley
  Bob Craig
  Thomas Ratliff

  **Committee on School Initiatives:**
  Ken Mercer, Chair
  Charlie Garza, Vice Chair
  Mavis B. Knight
  Gail Lowe
  Michael Soto

- Approved the purchases and sales of the investment portfolio of the Permanent School Fund for the months of October and November 2010 in the amount of $879,252,026 and $809,892,535, respectively.

- Approved the reappointment of SMSgt R. Monique Slater to a two-year term on the Lackland Independent School District Board of Trustees. Slater will serve from Jan. 21, 2011 through Jan. 20, 2013.

- Approved the reappointment of Mark Strother to the board of trustees of the Boys Ranch ISD for a three-year term from Jan. 21, 2011 through Jan. 20, 2014.

- Amended the Process for Review and Revision of the Texas Essential Knowledge and Skills, approving changes to step 4 in the process, defining who may serve as an expert reviewer. Step 4 now reads: “SBOE may designate up to seven expert reviewers. To be designated, the expert must be qualified to be on the panel. To be qualified, the expert must have a minimum of 1) a bachelor’s degree from an accredited university or college, 2) must have demonstrated his/her expertise in the subject area he or she is being appointed, and 3) have taught or worked in such field. If qualified and such expert is nominated by two or more board members, the expert shall be placed on the expert review panel. A board member may not appoint more than one expert.” The previously approved TEKS review and revision process can be found at [http://www.tea.state.tx.us/index2.aspx?id=6148&menu_id=720&menu_id2=785](http://www.tea.state.tx.us/index2.aspx?id=6148&menu_id=720&menu_id2=785).

- Approved for a period of three years the renewal of seven innovative courses: Advancement Via Individual Determination (AVID) I-IV; Peer Assistance and Leadership (PAL®) I and II; Peer Assistance for Students with Disabilities I and II; Reconnecting Youth: A Peer Group Approach to Building Life Skills; Service Learning; Student Leadership; and Teen Leadership. The board also approved one new innovative course, Aviation Honors Ground School for a three-year period. Innovative courses are ones that do not fall within any of the subject areas of the foundation or enrichment curriculum.

**IN OTHER ACTION continued**
State Board of Education members sworn into office

Five new members of the State Board of Education, and three returning members, were sworn into office Jan. 19 during a ceremony in Austin.

A ceremonial oath of office was administered to the board members by state Sen. Florence Shapiro, R-Plano.

The new members are:

- **Charlie Garza**, R-El Paso, who is an assistant principal in the Clint Independent School District. He has served as an education administrator in college, high school, middle and elementary school. He replaces René Nuñez, D-El Paso.

- **Michael Soto**, D-San Antonio, is an associate professor of English at Trinity University. He is also director of the McNair Scholars Program and the author of three books and numerous articles. He replaces Rick Agosto, D-San Antonio.

- **Thomas Ratliff**, R-Mount Pleasant, is a governmental relations consultant and lobbyist. He has been an active school volunteer. He replaces Don McLeroy, R-College Station.

- **Marsha Farney**, R-Georgetown, is an educator who has taught in both the public schools and at the university level. She holds a doctorate in curriculum and instruction. She replaces Cynthia Dunbar, R-Richmond.

- **George Clayton**, R-Richardson, is an academic coordinator at North Dallas High School in the Dallas Independent School District. As an academic coordinator, he oversees the English language arts and reading teachers at North Dallas.

Re-elected and beginning a new term are **Lawrence Allen**, D-Fresno; **Ken Mercer**, R-San Antonio; and **Bob Craig**, R-Lubbock.


Normally, board members are elected to four-year terms of office. However because of redistricting, these eight members will serve for two years and then all 15 board seats will be up for election.

Additional photographs from the ceremony are posted at [http://www.flickr.com/photos/txedu/sets/](http://www.flickr.com/photos/txedu/sets/).
Keeping up with the 82nd Texas Legislature

To keep up with the 82nd session of the Texas Legislature, log on to the following websites:

- General links to the legislature: http://www.capitol.state.tx.us/.

- Legislative calendar & agendas by date: http://www.capitol.state.tx.us/MnuCalendars.aspx


- House committee & chamber meetings: http://www.house.state.tx.us/schedules/welcome.htm

Plus, there are some websites run by private entities that will monitor the legislature and report on the daily business of the house and senate. Just posted is open-government.org, http://tx.opengovernment.org/, a free and non-partisan public resource for government transparency. The site is a new version of OpenCongress.org for the Texas Legislature. When you log on, you can track bills, votes, and members of the Senate and House of Representatives.

One can follow legislation through the Texas Tribune’s data tracker, http://www.texastribune.org/session/82R/bills/. Use this application, which is updated daily, to explore bill filings by searching for specific bill numbers — or their captions, subject categories or authors.