## Science MCAS stymies seniors

By James Vaznis

## Globe Staff / July 26, 2011

More than 2,500 12th-graders who did not pass the MCAS science section were denied diplomas last month at high schools across Massachusetts, raising fresh questions about the fairness of the graduation requirement and the quality of science instruction.

The students represent 3.7 percent of this year's graduating classes, according to data released by the state Department of Elementary and Secondary Education at the Globe's request.

The results were particularly crushing for the 731 students who passed the English and math MCAS exams, which have been graduation requirements for nearly a decade, but did not pass the science portion, which became a requirement last year. That number grew by nearly 200 students from last year, even though this year's graduating classes were slightly smaller.

For many, the science requirement - passing the chemistry, biology, physics, or technology/engineering test represents a seemingly insurmountable hurdle at the end of a strenuous obstacle course. While students are allowed to retake the test, a failure to pass by the end of high school prevents them from sharing in the graduation celebrations with classmates and moving on to college.
"They wouldn't even let me walk across the stage," said D'Andrea Young of Dorchester, who would have been a member of the last graduating class from Social Justice Academy if she had not failed the science portion by 2 points. "I was really mad."

Young faced considerable odds getting through her senior year. She gave birth to a daughter last November, then managed to juggle her new life as a mother while still doing well enough to pass her required courses for graduation.

Now, her plans to attend Bay State College in the fall are in jeopardy, where she hoped to prepare for a career as a probation or police officer.

Overall, 95.1 percent of 12th-graders in Massachusetts passed the English, math, and science exams in time for this year's graduation, down from 95.4 percent the previous year.

Mitchell Chester, the state commissioner of elementary and secondary education, said he was concerned about students who did not pass the Massachusetts Comprehensive Assessment System exams in time for graduation.

But he defended the requirement. "We have an obligation to educate students well, and we have an obligation to send them into the world with skills and knowledge that will prepare them for opportunities after high school," Chester said.

The failure rates, he said, might be a reflection of sub par science instruction in some high schools. Many school districts struggle to find qualified science teachers or are hamstrung by ancient science labs and other inadequate resources.

To assist districts, Chester said, the state is ramping up standards and instruction for science to better reflect
advances in the fields.
The new science requirement is intended to better prepare students for careers in the booming fields of health and science and help them navigate a world more reliant on technology.

But some local leaders, such as Mayor Scott Lang of New Bedford, say the MCAS requirement goes too far. Some students, they say, simply are not adept at the sciences or at taking standardized tests.

Lang believes the state should offer two diplomas: one for students who meet local graduation requirements and another for those who pass MCAS. In New Bedford, the percentage of students who failed only the science portion of MCAS jumped to 6.7 percent, from 3.2 percent last year.
"It's a needless hurdle that causes tremendous personal and societal hardship and pain," forcing many students to reluctantly become high school dropouts because their graduation plans were dashed at the last minute, Lang said.

Students take MCAS English and math exams in 10th grade, while many have the option to start taking the science exam in the ninth grade.

Yet meeting the science requirement still dogs many students well beyond what should have been their graduation day. Statewide, of the 533 students who did not receive diplomas in June 2010 because they failed only the science exam, 66 of them have subsequently passed the test, according to the state data.

Keeping students motivated is a tough but critical task, said Neil Sullivan, executive director of the Boston Private Industry Council, a public-private partnership of the city of Boston, higher education, and the business community.
"There is little economic future for men and women without a high school diploma," said Sullivan. "The unemployment rates for high school dropouts is horrific."

When the state made passing the English and math exams a graduation requirement for the class of 2003, the Private Industry Council formed a partnership with the Boston public schools to create a summer program to help students pass the exams while also giving them internships.

In Boston, students who failed only the science MCAS exams this year rose to 3.2 percent, from 2.4 percent last year, according to state data.

As part of the "Classroom at the Workplace," Dashawn Taylor of Roxbury spends an hour every morning taking a biology class on the 17th floor of the John Hancock Tower and then heads to an internship at the State Street Financial Center, where the 18 -year-old does data entry.

Taylor missed passing the biology exam by 3 points, keeping him from graduating from Monument High School, he said.
"It's not fair at all," Taylor said. "Everybody is not good with standardized testing. But l'm going to do whatever it takes to pass it."

Neysi Amaya of Dorchester attends a similar class offered by the program at the Reggie Lewis Track and Athletic Center, where one of her classmates is D'Andrea Young. Amaya also failed the science exam, but she was at least able to take part in the graduation at Madison Park Technical Vocational High School, where she received a certificate in culinary arts.
"I actually didn't want to go to graduation," said Amaya, "but I had family members and loved ones pushing me to go. I was happy at the end of the day that I was there with everyone else, even though I didn't get my diploma."

The three students are taking the biology course this summer as they await results of a retest they took last month. Each hopes the results will be good. Otherwise, they will have to wait until the state offers another retesting next February and another round of tutoring.
"I don't feel like going back to my high school," said Amaya, who dreams of opening a restaurant that serves Honduran- and Jamaican-inspired cuisine. "I really want to get over that MCAS and go into the real world and see what it brings me."

James Vaznis can reached at jvaznis@globe.com. Follow him on twitter @GlobeVaznis.
© Copyright 2011 Globe Newspaper Company.

