

High schools warned to be more demanding

By KATHLEEN CARROLL

Message to high school students: Get ready for physics.

That's one possible new graduation requirement posed by educators and business leaders in New Jersey, who say high school diplomas are too easy to earn and too many teenagers graduate without the skills they need to survive college or a job.

"The world is changing," Dana Egreczky of the New Jersey Chamber of Commerce told a group of educators meeting last week at the College of New Jersey in Ewing. "High schools need to change to keep up."

Being ready for the future means competing with potential job candidates from around the world in careers that haven't yet been invented. Business leaders say more than two-thirds of new jobs will require a bachelor's degree or some post-secondary college work. And while an adult may land a traditional blue-collar job without a college degree, maintaining complex modern machines often requires some understanding of trigonometry and high-level reading skills.

"If you want to be prepared for the workforce today, a high school diploma will not get you there," said Egreczky. "Parents and students must push themselves harder."

Although the state's high schools offer rigorous classes -- students at some schools can choose between two dozen Advanced Placement classes, multiple lab sciences and other demanding classes -- students are not obligated to enroll. The state's graduation requirements mandate only a minimum number of credits in 12 subjects, not a particular course of study or level of sophistication. And so while some teenagers follow demanding, college-ready schedules, others are able to slide by with simpler classes.

That's the loophole the state's High School Redesign Steering Committee is trying to close. New Jersey is one of 26 states participating in the American Diploma Project, an effort to redraw high school curriculum and diploma requirements to match the demands of college and the workplace. It was begun by a group of business leaders and governors in 1996; New Jersey signed on last year.

"We all know that high schools were designed more than 100 years ago for an industrial economy," said Joyce Powell, president of the New Jersey Education Association. "It's not just about adding more to the curriculum, it's about doing things differently."

That means forcing students to take more demanding classes. If the committee has its way, every student would have to pass biology, chemistry and physics to earn a high

school diploma -- while also taking four years of English classes, two years of algebra and a geometry course. The changes could mean courses like earth science and creative writing might fall by the wayside.

The differences between students who push themselves in high school, and those who do not, are easy to spot after graduation -- in New Jersey and nationwide.

Students who don't do their homework attain lower levels of education and earn about 19 percent less than the average graduate, according to research published by the American Federation of Teachers. Those who spend more than 15 hours a week on homework go farther in school and earn 16 percent more than average.

In New Jersey, a state Chamber of Commerce poll found 99 percent of businesses reported high school graduates were not prepared for company jobs. A national survey found 45 percent of businesses reported high school graduates were not trained to advance beyond entry-level jobs.

Simpler high school classes can lead to trouble in college as well. Forty percent of students at four-year New Jersey colleges end up taking remedial courses, according to the committee. At community colleges, it's 78 percent.

Although state Education Department figures show as many as 90 percent of New Jersey high school students graduate, as few as 25 percent eventually earn a college degree, according to estimates by the National Center for Public Policy and Higher Education. Nationwide, the organization estimates about 68 percent of students graduate from high school, and 18 percent earn a college degree.

"In some high schools, the rigor is not there," said Jane Oates, executive director of the New Jersey Commission of Higher Education.

The commission, which is co-chaired by Governor Corzine, will make recommendations to lawmakers and the state Board of Education in early 2007. All changes will be made "incrementally," Education Commissioner Lucille Davy cautioned. "The goal is to prepare young people for the future, not to force more out the door."

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So long, SRA tests.

Well, in a few years anyway. Part of making a high school diploma more meaningful is getting rid of the Special Review Assessment, an easier alternative to the statewide High School Proficiency Assessment, or HSPA.

Kids who fail the HSPA can graduate anyway, after they get remedial help and pass the shorter, more personal tests allowed under the SRA.

Hardly anyone fails those.

About 18 percent of students statewide, and half of the students in urban districts, use the SRA to earn their diplomas.

This past summer, the state Board of Education voiced its support for getting rid of the SRA. The state Education Department has already proposed ending the SRA in reading starting with this year's eighth-grade class, and ending the math SRA with this year's seventh-grade class.

Officials must come up with alternatives for students who cannot complete the statewide HSPA. Education officials plan to do so by the end of this year.

-- Kathleen Carroll

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Math skills

Graduates going on to college or to work need similar skills.

Machine operator*

Required skills:

- Add, subtract, multiply, divide and simplify rational expressions.
- Calculate and apply ratios, proportions and percentages to solve problems.
- Recognize and solve problems using a linear equation and one variable.
- Apply units correctly in expressions involving measurements.
- Determine the perimeter or circumference of geometric shapes.

College math

Required skills:

- Add, subtract, multiply, divide and simplify rational expressions.
- Understand functional notation.
- Solve systems of two linear equations in two variables.
- Solve quadratic equations in one variable.
- Graph a linear equation and quadratic function.
- Determine the perimeter or circumference of geometric shapes.

*Eastman Chemical Company

Source: American Diploma Project Network