

MATH & SCIENCE

M A T T E R

THE WORLD IS WAITING.

Will Your Child be Ready for College & Work?

A MATTER OF SUCCESS: Why Your Child Needs Math & Science

More math and science = more opportunities.

The more your child knows about math and science, the more options he or she will have in life.

Math makes the difference.

A majority of workers who earn more than \$40,000 annually have two or more high school credits at the algebra 2 level or higher.

Math and science are a part of everyday life.

Math and science teach critical skills that your child will use daily in their adult lives. From negotiating the terms of a car lease to making healthcare decisions, math and science matter.

“Math is what takes sound and turns it into music. Music is a series of patterns and that’s what math is.”

—Trip Holtgrewe, musician

A MATTER OF FACTS: Numbers Don’t Lie

More and more jobs require math and science, even at the entry level.

- Nationwide, the number of jobs requiring technical training is growing five times faster than other occupations.
- Research shows that the skills needed to succeed in freshman-level courses in two- and four-year colleges are the same as the skills needed for family-wage jobs.

Yet Washington’s graduates aren’t prepared.

- In 2005, 26,000 Washington employers reported they could not find applicants with the math skills needed to fill their entry-level jobs.
- Washington leads the nation in jobs for people with bachelor degrees in science and engineering, but is 38th in the number of students graduating with these degrees, forcing employers to look outside of Washington to fill these high-wage jobs.

No matter the career, math and science matter.

		ALGEBRA 2	CHEMISTRY	COLLEGE CHEMISTRY	COLLEGE CALCULUS	JOB-RELATED COMPUTER & TECH. SKILLS
TECHNICAL TRAINING	Auto Mechanic	X	X			X
	Computer Programmer	X				X
	Medical Lab Tech.	X	X	X		X
2-YEAR DEGREE	Dental Hygienist	X	X	X		X
	Firefighter	X	X			X
4-YEAR DEGREE	Web Designer	X				X
	Accountant	X	X		X	X
	Agricultural Tech. & Manager	X	X	X		X
	Registered Nurse	X	X	X		X
	Software Engineer	X	X		X	X

A MATTER OF MONEY:

Learn Now or Pay Later

In Washington state, roughly 50% of high school graduates who immediately enter community or technical college require remedial, or “pre-college” math classes. Students don’t receive credit for these classes, but do have to pay for them. The lesson: why pay for classes that can be taken for free in high school?

DID YOU KNOW?

The highest level of math taken by students in high school is the greatest indicator of their chances to earn a bachelor’s degree, regardless of race, background or income.

“ I knew I wanted to be a firefighter and figured I wouldn’t need math and science for that. As it turned out, I had to take additional math classes during my job training, and wasted time on things I should have learned in high school. ”

—Mike Aguilar, firefighter

A MATTER OF PREPARATION:

What It Takes To Be College & Work Ready

	TO GRADUATE FROM HIGH SCHOOL	TO QUALIFY FOR WASHINGTON’S PUBLIC 4-YEAR UNIVERSITIES	TYPES OF CLASSES NEEDED
MATH	2 Credits (This will increase to 3 credits*)	3 Credits (4 credits for science & technology majors or selective colleges)	Integrated 1, 2 & 3 Algebra 1 & 2 Geometry Trigonometry Pre-calculus Calculus
	<i>*The State Board of Education will set the implementation date.</i>		
SCIENCE	2 Credits (Must include one of: biology, chemistry, physics, principles of technology)	3 Credits (4 credits for science & technology majors or selective colleges)	Biology Chemistry Earth Science Physics Astronomy Oceanography Geology
	<i>Some career and technical education classes may meet these requirements. Check with your local school district.</i>		



A FAMILY MATTER: Tips for Parents

- **Get involved.** Actively participate in your child’s course selection each semester. Encourage them to take three or four years of math and science in high school.
- **Have high expectations at home.** You have the biggest impact on your child’s success.
- **Help your child make the connection.** Discuss how high school courses affect his or her future career options.
- **Be your child’s best advocate.** If your child is struggling with math or science, visit with a teacher or school counselor to get extra help.
- **Remind your child that it’s not just about the grade.** It’s about learning and being prepared for the future.