Its all ‘hands on’ in Material Science class

Students develop skills that can lead to a career in technology

Evidence of the work of material scientists seems to be nowhere yet it is everywhere.

From Band-aids to Boeing airplanes, the hundreds of items we use and see and wear everyday are most often a product of the work of material scientists and engineers.

So, what is Material Science?

Material scientists bring elements of science, physics, design and even biology together to develop everything from lightweight and environmentally-safe packaging for food to new adhesives that can repair metals, or fabricate plastics to build a new joint for a fractured hip.

Material engineers also plan how to manufacture or produce these new materials.

Thanks to the support of the Mercer Island Schools Foundation, Mercer Island High School launched another “hands-on” science class this year — Materials Science.

Studies show that hands-on, active learning in science boosts students’ performance. As a result, more students choose science as a career.

For the students in Sam Gadbury’s Material Science class at Mercer Island High School, the work is hands on and collaborative. The class mimics the dynamics of a laboratory or manufacturing environment. There are shelves full of gear and supplies. The class meets together around a table to compare results of a project.

A message from the Superintendent

As you see the bright yellow busses on our roads safely transporting our students to school and back, we are reminded about the cyclical nature of our work — children returning after summer break to our classrooms in the fall.

Much happened during our warm and dry summer especially with school construction. The new 10-classroom addition at the high school opened in time for the first day of school. The four new science labs and six new general-purpose classrooms are well suited for our expanded curriculum in science and technology. Classroom space was needed for our expanding high school enrollment.

see page two
Divided into teams, the students made various types of “slime.” Each team made a small batch using a different ratio of Borax and polyvinyl acetate. Wearing gloves and safety glasses, the class discussed and compared the scientific properties of each team’s slime. The different characteristics in team’s slime can determine how it could be used to build new materials or manufacturing processes.

“The relevancy and application of this class is high,” said Kristine van der Hoeven, Director of Career and College Readiness at the high school. “But it is not all chemicals or physics,” she explains. “Independent thinking and creativity also play a role.”

There are 20 students enrolled in the class, six are female. Some students are taking the class to satisfy graduation requirements while others want to get a jump start on a new career path.

Junior Leah Paborsky began taking science classes as a sophomore. She said she is glad to be “playing with real stuff” in the class. “It is different and better than just learning the science in a classroom,” she said. “I really like having a lab every week.”

The class is one of many offered within the College and Career Readiness program at the high school. The program includes offerings in business marketing, health and professional sciences, media and broadcasting, technology, information technology, visual arts and publications.

For more about the Career and College Readiness programs, contact: Kristine.vanderHoeven@mercerislandschools.org.

The Mercer Island School District’s focus on students’ well-being extends to healthy eating.

In October, the District’s Food Services Department put on a “Taste Washington” event at each school.

Kitchen staffs set out an array of fresh fruits and vegetables for students to try. The colorful displays had a sign for each fruit or vegetable, that showed where each was grown in our state.

It was a another way to encourage students to look again at the fruits and vegetables served every day at our schools.
A new look at Washington State History

The history of Washington state has not changed. But in the process to keep students engaged and up-to-date, a new book was chosen.

The book, entitled, Washington, A State of Contrasts, was purchased with funds from the Mercer Island Schools Foundation.

The authors of the book, Dale A. Lambert, a long-time history teacher, and Dustin W. Clark, are both Washington state natives.

The 400-plus page book presents the history of the state through a multitude of lenses and points of view.

Each page is packed with illustrations, maps, photos, profiles of key individuals and timelines.

But the book does more than tell stories. It offers students several ways to approach the subject and access the information.

Teachers like Islander Middle School teacher, Vicky Mann, use its format to show students how to read a textbook.

“There are many ways that they can harness the resources in the book to put it all together,” said Mann.

“For students, the book brings lots of connections,” said Mann. “They are pleased when they find they already know something about these events.”

“The kids love it.”

Message from page one

Our new Northwood Elementary School is on track to open next year with nearly 450 students. It will ease crowding in our existing elementary schools.

Islander Middle School has a new parking lot and student drop-off area. You will soon see an outline of the new gym and music rooms as they take shape. The expansion will open in the fall 2016.

All of our construction projects remain on time and within budget.

There are over 300 new families in our schools this fall, many coming from around the nation and the world. Please help us welcome them to our school community.

It takes an entire community to build a village of caring adults who support students on their learning journeys.

I am fortunate to work with your school board and with you in building a world-class educational system on Mercer Island. Thank you.

Dr. Gary Plano
Northwood Elementary School construction update

Several significant milestones have been reached on the construction of Northwood Elementary School. In October, more wall framing and roofing was done. A large concrete retaining wall on 86th Ave. S.E. was completed.

Visit www.MercerIslandSchools.org/Construction

MERCER ISLAND SCHOOL DISTRICT NEWSLETTER

MISD Board of Directors

Brian Emanuels, President
brian.emanuels@mercerislandschools.org

Pat Braman
pat.braman@mercerislandschools.org

Adair Dingle
adair.dingle@mercerislandschools.org

Dave Myerson
dave.myerson@mercerislandschools.org

Ralph Jorgenson, Vice President
ralph.jorgenson@mercerislandschools.org

Dr. Gary Plano, Superintendent
gary.plano@mercerislandschools.org

The Mercer Island School District does not discriminate in any programs or activities on the basis of sex, race, creed, religion, color, national origin, age, veteran or military status, sexual orientation, gender expression or identity, disability, or the use of a trained dog guide or service animal and provides equal access to the Boy Scouts and other designated youth groups.

The following people have been designated to handle inquiries regarding the nondiscrimination policies:

Harassment, Intimidation and Bullying (HIB) Coordinator:
Dr. Gary Plano, Superintendent, (206) 236-3300
gary.plano@mercerislandschools.org

Title IX Compliance Coordinator:
Dean Mack, CFO/COO, (206) 236-4522
dean.mack@mercerislandschools.org

Section 504 & ADA Coordinator:
Dr. Lindsay Myatich, Director, (206) 236-3326
lindsay.myatich@mercerislandschools.org

Civil Rights Compliance Coordinator:
Simmi Kher Director, (206) 236-3330
simmi.kher@mercerislandschools.org