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Intel engineer visits students via video

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Celia Hampton, a fourth grade teacher at West Hills Elementary School, and her class listen this past week to a science lesson via video conferencing at Pendleton High School. Staff photo by Don Cresswell.

PENDLETON — Emily Sorey grabbed her head in frustration as her marshmallow and spaghetti tower started its slow-motion fall.

Her three partners, Josh Christensen, Tristin Van Blokland and Michael Brunette, reached out quickly to maneuver the structure back into position. Emily, a fourth grader, took a deep breath and moved on to another strategy.

Intel engineer Skip Gaudreau smiled from a television monitor that sat where the teacher usually stands. He watched four groups of students absorbed in building towers that varied radically from one another.

Gaudreau chose the moment to talk about Thomas Edison, who invented the light bulb. It took Edison several years, Gaudreau told the kids, and more than 400 tries to invent incandescent electric light by developing the light bulb.

After his numerous failures, Mr. Edison was known to say, “I just learned another way not to do it.”

Or, as Gaudreau put it, “from the ashes of our failure grow the roses of our success.”

Gaudreau spent about an hour with Celia Hampton’s West Hills Elementary School class as part of a program designed to spark early interest in engineering.

Though the engineer has done such sessions plenty of times, Wednesday was the first time he has visited a classroom via video hook-up. He talked to the students from a studio

at the Oregon Museum of Science and Industry (OMSI) in Portland.

The program, sponsored by the Business Education Compact and funded by NASA, linked engineers with nearly 20,000 students in February to coincide with National Engineering Month.

Gaudreau said becoming an engineer was a natural choice; his father sparked his interest in the field.

“My dad was a tinkerer,” he said.

He and his brother spent hours taking cars and computers apart and looking at different substances under a microscope. He remembers his father, who had “two or three master’s degrees,” pricking his finger and putting blood on a slide for his boys to study microscopically.

“We’d go down to the local sloughs and take samples, too,” Gaudreau remembered.

As for his job, the class laughed when the engineer told them, “I break things for a living.”

Gaudreau referred to the time he spent testing Web sites and applications to the limit, attempting to find flaws.

The students learned the multitude of different forms that engineering can take. Of course, they work on cars, houses, roads and electrical systems, he said, but they also invent toys and design video games.

Josh Christensen’s eyes lit up at the last one. He asked about how much time they spent testing each level and possible scenarios, and Gaudreau described the life of friends who work as Microsoft game engineers.

“They program the game, then play it to make sure it works right,” Gaudreau said. “They don’t even need the online cheat guides.”

Gaudreau and the students discussed weighty questions such as, “Does tooth decay happen in zero gravity?” and talked about eating junk food on Mars.

He encouraged the students to consider engineering if they like to figure things out or take items apart, and especially if they consider math and science fun.

He equated engineering with magic.

“Magicians are nothing more than people who know more about technology,” he said.