

Planetarium Rolls Into Feinsein

My Stars!



Jessica Boisclair • Daily Times

Dr. Dennis Machnik speaks to the a group of Feinsein Middle School eighth graders before they enter the planetarium Wednesday morning.

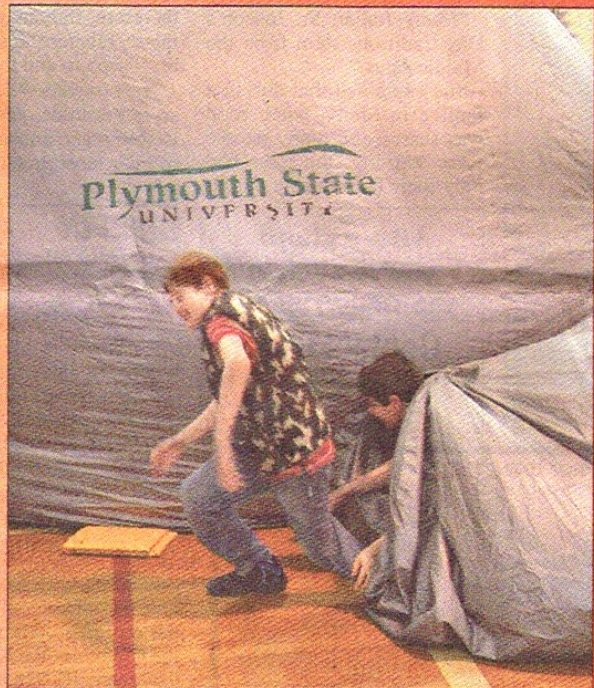
Traveling planetarium a hit at Coventry's Feinsein Middle School Wednesday

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COVENTRY— More than 400 eighth graders at Alan Shawn Feinsein Middle School were given the opportunity to pack into a portable planetarium Wednesday and Thursday morning and learn about various planets, stars and galaxies.

Linda Grandchamp, eighth grade science teacher, invited Dr. Dennis Machnik, a professor from Plymouth State University in New Hampshire, to visit the students as a way to introduce them to astronomy. Each spring, the new eighth graders are taught about astronomy in the classroom.

Dr. Machnik gave a presentation to six classes on Wednesday and an



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other six classes on Thursday morning as a way to educate the students about the universe.

Approximately eight years ago, he said that Plymouth state provided him with the portable planetarium after they received a grant.

Once a week when he is not teaching classes, he travels throughout New England with the blow-up sphere to various schools.

The planetarium accommodates approximately 30 students and houses a standard LCD projector in the center.

Dr. Machnik said he uses a free program called stellarium, which students can download on their home computers.

This program allows him to view the sky as it is at the current time; with a remote he can fast forward to the nighttime hours.

Using the projector and the program, Dr. Machnik can also show constellations, planets, galaxies, star clusters and comets on the dome.

Approximately 30 students filled the

blow-up planetarium every hour to learn about the weather, astrology and the various aspects of astronomy.

He explained to the students that many people believe the temperature is colder in the winter because the Earth is farther from the sun, but that is not true.

"We're 92 million miles from the sun in winter and 94 million miles away in July," he added. "Australia has summer when we have winter, if we're farther from the sun; they're on the same planet so they'd be farther from the sun also."

He said one of the reasons the temperature is colder in the winter is because during the winter the sun only reaches a vertical angle of 20 degrees. During the summer, the sun is out for 15 hours a day and reaches an angle of 70 degrees, causing the Earth is heat up quicker and for longer.

Dr. Machnik zoomed in on the planet Jupiter to teach the students about the biggest planet in our solar system.

He explained that Jupiter can fit 1,300 Earths inside of it, but nobody can land on the surface because there is none.

"The clouds seen around Jupiter are all

gas and there is a hurricane, which is big enough to fit three planet Earths inside it and it's over 400 years old," he added. "It's called the great red spot." Underneath all the gas, he told the awestruck students, is a thicker atmosphere and a rocky core. The core however, is deeper within the planet and cannot be stood on.

Mars however, could someday turn into a planet like Earth, he said.

"There are plants on Earth that can survive on Mars, like plants from Antarctica," he added. "Most of the atmosphere on Mars is carbon dioxide so putting plants on the planet would convert it to oxygen after 1,000 years."

After discussing some planets, Dr. Machnik spoke to the students about the constellation Orion and the star Betelgeuse that is considered the "armpit" star.

He explained that this star may have already blown itself up but because it's 427 light years away from Earth, it would take that long before the light traveled from Betelgeuse to Earth, or before it disappeared for anyone to realize it's not still there.