

# Radnor opens middle school of the future

By Dan Hardy

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CHARLES FOX/Inquirer

Bill Laffey, a former Radnor Middle School principal who stayed to oversee the construction of a new middle school, stands by the district seal in the lobby's floor.

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After years of planning and discussion, and after laying out millions of dollars in construction costs, several area school districts - Abington, Burlington Township, Camden, North Hanover Township and Spring-Ford, among them - are celebrating the opening of a new building this fall.

One of the new schools, the \$48 million Radnor Middle School in Wayne, has a plant-covered roof on the academic wing and plants on other elevated surfaces that produce oxygen, reduce storm water runoff, and keep the building's temperature down. The school, which opened this week, helps the district fulfill its promise to create an environmentally friendly "green" building.

School officials say they know of no other public school in the area with a green roof.

The four-story structure, located a few blocks from downtown Wayne, is one of only a few dozen public schools in Pennsylvania and New Jersey whose administrators are seeking certification from the U.S. Green Building Council for its environmentally conscious features.

Those include geothermal heating and cooling provided by 144 wells sunk 500 feet into the ground, saving fuel costs and cutting dependence on fossil fuels. There are recycled materials in carpets, ceiling tiles, counters and tackboards; the lobby floor has recycled glass shards embedded in it, instead of granite chips. Classrooms have heat and motion sensors that turn off lights when they are empty, and light sensors to shut off the row of lights nearest the windows when there is adequate natural light.

The building's fluorescent bulbs are designed to reproduce the colors of natural light because research shows that students and teachers do better work that way. In each classroom, the carbon dioxide level is monitored and more fresh air is piped in if it gets too high. Heating and cooling equipment are located outside the classroom, making it quieter.

"The end goal - the intent - is not only to be environmentally conscious, but to provide the best, most healthy learning environment for kids, said district operations director Leo Bernabei.

As proud as they are of the environmental features, district administrators are even happier that after holding classes for decades in a building that first opened in 1923, they are offering the school's 850 students and their teachers a school with architectural and technological features that match the teaching methods and philosophy of the district.

Three of the four floors in the academic wing of the new school hold one grade each; they are subdivided into

areas called pods - two on each floor, each with five classrooms. Most of the students in each grade are divided into teams of 100 to 110; they attend all their core academic classes in their pod and there is space enough for the whole team to meet together in a large carpeted common area carved out of the hallway. The teachers in each pod work with the same team of students and share planning time each day.

Each team has laptop computers stored in the commons area. The building has wireless Internet, cable TV for educational channels, and overhead liquid crystal display projectors and screens are built into each classroom.

Each grade also has a double-sized classroom especially designed for an interdisciplinary class of 40 students and two teachers whose academic life is arranged around a theme that the children study, rather than separate language arts, math, science and social studies classes. There are no letter grades and few tests in the interdisciplinary groupings; participants are assessed mostly by their work on long-term projects. Students volunteer for those programs and are picked by lottery.

Dot Conaboy, a sixth-grade language arts and social studies teacher, said last week as she set up her classroom that "having the pod [common] area right here is going to be a big plus for projects where we need to spread out a little bit more. And we can now join two or more classes together when we want to - that will be really nice."

In her room at the old middle school, Conaboy said, "I had a brick wall for a view; now, I have trees, sunlight and blue skies. It is just gorgeous - I love it."

Said Tom Rendulich, a sixth-grade interdisciplinary classroom teacher: "We couldn't ask for anything better. We have everything we need and more. . . . It's perfect."

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