

Online Classes Offer Virtual Dissection, but Gym Still Takes Sweat

By SAM DILLON
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MINNEAPOLIS -- The nation's public schools are rushing to reconfigure scores of traditional courses from basic composition to calculus so students can take them via the Internet. One of the unlikely new offerings in this vast experiment is online gym.

Sound like an oxymoron? Not in Minneapolis, where a physical education course joined the school district's growing online catalog in the spring and already has a waiting list.

"I've never seen a response like this to any course," said Frank Goodrich, a veteran football coach who is one of two instructors teaching online physical education this summer to about 60 high school students.

The course allows students to meet requirements by exercising how they want, when they want. They are required to work out hard for 30 minutes four times a week and report to their teachers by e-mail. Parents must certify that the students did the workouts.

One recent day, after Dustin McEvoy lifted weights, Sasha Hulsey swam in a lake and Marc Sylvestre played hockey, they sent in reports with details on their warm-ups, cool-downs and how fast their hearts had beat. Mr. Goodrich, reviewing their e-mail messages on his laptop the next morning, said that although most students were sticking to their required routines, a few slackers were headed toward F's.

Physical education is one of 27 online courses now offered by the Minneapolis Public Schools, which had none four years ago. Thousands of other districts nationwide are adding online courses, said Susan Patrick, director of educational technology at the federal Department of Education.

"We're seeing just tremendous growth," Ms. Patrick said, "in enrollments and in the kinds of courses offered."

In a survey, the department estimated that there were 328,000 student enrollments in online courses offered by public schools during the 2002-3 year. Ms. Patrick said enrollments had probably doubled since then.

Many districts, including Minneapolis, are writing their own Internet courses, and more than a dozen states have established virtual schools to supply courses to brick-and-mortar schools. Some schools are buying online courses from commercial vendors, the survey showed.

Districts providing specialized courses -- macroeconomics, say, or astrophysics -- are choosing to offer the courses online instead of hiring on-site instructors to teach

handfuls of students. Offering online versions of basic courses required for graduation is also a way to make room for electives in crowded classroom schedules.

The Illinois Virtual School offers 90 online courses, including about 16 Advanced Placement offerings. One of the most popular online courses is consumer education, which teaches checkbook management. The course is required by the state for graduation, but many students have had trouble fitting it into their schedules, Matthew Wicks, the school's director, said.

Physical education is not the only course that seems an odd fit for Internet study. Take Advanced Placement biology. The College Board's recommended syllabus for the course includes 12 rigorous laboratory exercises, known among educators as the dirty dozen.

Virtual High School, a cooperative based in Massachusetts that offers online courses to more than 300 member schools in 28 states, offers an online Advanced Placement biology course that covers laboratory lessons through computer simulations, including a virtual dissection of a pig, said Liz Pape, who runs the school.

"It's so neat that you can learn everything you need to know about dissection without the formaldehyde smell," Ms. Pape said.

Still, some committed online educators remain unconvinced. Tim Snyder, the executive director of Colorado Online Learning, which offers more than 50 online courses to Colorado schools, included physical education with studio art, marching band and the laboratory sciences as subjects best left to brick-and-mortar schools.

"These are still better experienced in a hands-on setting," Dr. Snyder said.

But online gym has prospered. That has been possible in part because physical education itself has evolved. Once a highly regimented class centered on team sports and competition, physical education now emphasizes healthy living and personal fitness, topics some see as eminently suited for independent Internet study.

One of the first schools to offer physical education online, in 1997, was Florida Virtual School. It is now the nation's largest public online school, with 21,000 students taking at least one course. Personal fitness, the online version of the state's physical education requirement, was the school's most popular course last year, attracting 4,500 students. (Second-most popular was economics, with 2,400 students.)

Some students, including a blind teenager in Miami and a student in Melbourne, Fla., who was recovering from a kidney transplant, signed up because their health problems prevented their taking regular gym classes, said Jo Wagner, one of Florida Virtual's lead instructors. But Ms. Wagner said most students took the course to free their schedules for foreign languages and other electives at their traditional schools.

The same pattern holds in Minneapolis, where Abbie Modaff, a sophomore, is taking her second semester of online gym this summer. The daughter of self-described "strugglingly middle-class" parents, she signed up last spring to open time in a schedule

snarled with English, Latin, biology, world studies and advanced mathematics classes, not to mention horseback lessons, soccer games and concert band.

This summer, Abbie has been training for a triathlon, so she has e-mailed reports on swimming, biking and jogging workouts to her instructor, Tamara Cowan, who is teaching online gym to 31 Minneapolis students this summer from a friend's home in Sacramento.

"When I'm not feeling like I'm about to die, running can be incredibly good," Ms. Modaff wrote to Ms. Cowan in one workout journal in July.

Last spring, when Ms. Modaff sought to use her horseback rides to fulfill some workout requirements, Mr. Goodrich balked. But using a heart monitor, Ms. Modaff documented that her pulse frequently surged to a pounding 170 beats per minute as she flexed her legs and torso to guide her horse through a dressage course. Mr. Goodrich assented.

"She showed us that her heart rate was elevated, and her muscle strength was improving," he said.

Because the class has faced much questioning, the district issues heart monitors, requiring that students send pulse data to teachers and that parents sign the workout reports.

Mr. Goodrich and Ms. Cowan are also on the lookout for cheats. Mr. Goodrich recently sat on his couch in sweat pants and a T-shirt, and, peering into the screen of his Macintosh, signed on to the school district's Web site. He found 31 student e-mail messages documenting recent workouts. There was also a message from a student who pleaded the equivalent of "my dog ate my homework."

"I have just got back in town for three days and then I will be gone for three days," the student wrote to Mr. Goodrich. "I am trying to get as much work done as possible. Thanks."

Mr. Goodrich checked the student's preliminary grades and found she was hopelessly behind with her assignments. He would send her a warning, he said, and predicted she would fail the course.

About 20 percent of the students dropped out of online gym in the spring, said Jan Braaten, the district's lead physical education instructor.

"Even though we told them it would be as hard as or harder than traditional P.E., some thought it was going to be a cakewalk," Ms. Braaten said.

Even the course's author, Brenda Corbin, who writes curriculums for the Minneapolis district, was dismissive at first.

"I refused to be a part of it," Ms. Corbin said of her initial reaction a year ago, when Ms. Braaten and district administrators approached her about writing the physical education course.

"How do you know they're really working out?" Ms. Corbin said she asked.

But she later changed her mind. "I was uninformed about what you can do over the computer," she said.

Renee Jesness, the district's online learning coordinator, said she frequently encountered skepticism about proposals to recast traditional courses for study online. But critics often reconsider when they learn how creative the online courses can be, Ms. Jesness said.

Even at a time of budget cuts, the Minneapolis district is adding online courses about as fast as curriculum writers can create them, Ms. Jesness said.

"We're in think-tank mode, while the rest of public education is in triage," she said.

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