April 12, 2005

Chalkboards? Try Using Chessboards

By SUSAN SAULNY

The games drew about 15 chess enthusiasts to a windowless conference room at City College in Harlem, where pawns and rooks were moved with such intensity of purpose that the scene could have passed for yet another high-stakes tournament.

The grandmaster and bona fide chess luminary Maurice Ashley was there, calling out commentary as he often does when championship matches are broadcast around the world. He is known to use lines like, "Pawns are attacking mercilessly!" and "The bishop is slicing and dicing!"

But what Mr. Ashley had to say about chess on this night was more academic. Literally. "A lot of times in education we try to teach kids the one right answer and that leads, in my opinion, to robotic thinking," he told the players, encouraging them to think of multiple possible moves before choosing the best play. "Real life isn't like that. Is there ever one right answer? Generating alternatives for the sake of alternatives is a good thing."

The players, mostly New York City public school teachers, nodded. This routine, the playing of chess followed by deep thoughts on education, happens every Wednesday night during a new class Mr. Ashley is teaching called "Introduction to Logical Thinking Through Chess" for the mathematics department at City College. Mr. Ashley and the dean of the college's school of education, Alfred S. Posamentier, organized the class with a lofty goal: improve teaching by guiding a group of teachers through the problem-solving strategies that are part of a good chess player's arsenal.

The seminar, an elective class worth two graduate credits, meets once a week for two and a half hours. Mr. Ashley tries to get the teachers to do what he does in chess and in life: think backward with a desired outcome in view, generate multiple options as possible solutions to any question, consider the perspectives of others, and give respect to the least powerful, the pawns of the game.

"Over the years, we have tried many different approaches to developing the most effective teachers," Dr. Posamentier said. "We have regulated the size of the class, the material the teacher uses, the kind of content background that is most desirable, and the philosophy that should work best. However, it seems we have not concentrated enough on the general thinking strategies that a teacher should master to maximize his effectiveness."

Now the educators are thinking about their thinking.

Before class on Wednesday night, Mr. Ashley explained a personal distaste for memorization and facts, and laid out his education philosophy, the one he hopes the teachers will take from the class: "Knowledge flips every day. What we know becomes wrong tomorrow. We need kids who know how to think."

The class seems a natural fit for Mr. Ashley. Unlike many of the country's top players who spend a lot of time preparing for tournaments, Mr. Ashley, a native of Jamaica who grew up in Brownsville, Brooklyn, and lives in Queens, has been teaching children chess for years. He had never taught teachers before, but was willing to try.

"My method has always been not just to teach chess moves, but to better accelerate thinking and concentration

skills," Mr. Ashley said. "These ideas have been a part of my technique for so long, I said, 'Of course!'"

The United States Chess Federation named Mr. Ashley Grandmaster of the Year in 2003, but other proud moments in his career involve lesser known titles. Mr. Ashley was coaching the Raging Rooks of Junior High School 43 in Harlem when they won the National Junior High School Championship in 1991. He also coached the Harlem-based Dark Knights, two-time national champions in the junior varsity division.

"What's he doing on campus? That was my first thought when I heard about the class," said Josh Weiner, a senior at City College who intends to be a math teacher.

Mr. Weiner was playing a tight match on Wednesday night against Eliza Kuberska, a Hunter College High School math teacher, and Levon Cooper, a City College administrator.

Ms. Kuberska said the class was the best she had ever taken. Just a novice chess player when she began several weeks ago, Ms. Kuberska has learned enough strategy to be a formidable opponent. She intends to tell her class about her transformation for inspiration.

"I want them to see that it's not magic," she said, speaking of problem-solving. "I want them to challenge their own presumptions about their capabilities. A lot of kids think if they weren't born a genius, they can't get it. But I want them to see that intuition can be learned; it can be taught."

Caridad Guerrero, who teaches seventh-grade math at Intermediate School 528 in Washington Heights, said she had learned that "one bad move doesn't end the game" and "to think beyond the moment."

She related that to her classroom this way: "Sometimes lessons don't go the way you planned. You had great ideas and it plays out another way. But that doesn't have to wreck your class."

Khalid Bashjawish, a ninth-grade English teacher at Flags High School in the Bronx, said Mr. Ashley's class had helped him push his students beyond their comfort zones to write more ambitious papers. He said he recently rejected an entire class's autobiographical essays because they were too limited in the exploration of "the self."

"You get stuck into habits of thought," he said. "Chess is a nice way to break out of that. This class has a way of saying, 'You can move beyond that.'"

The class is a product of a challenge that two alumni, Anne and Arnold Gumowitz, posed to Dr. Posamentier upon giving the college a $50,000 grant, officials said.

"There's no better sport that I know of than chess," said Mr. Gumowitz, who works with his wife as a real estate investor and a developer. He said he wanted to see if City College could do something that perhaps no college had: offer credits for chess. "I said we'll back it up with a grant and get a grandmaster, do it right," he said. "Maybe we'll get other grandmasters and get something started that's really great."

So the college came up with a way to incorporate chess into its math education.

"We had to think of something that made sense, because there are chess tournaments all over the map," Dr. Posamentier said. "But this teaching is really something special. It works."