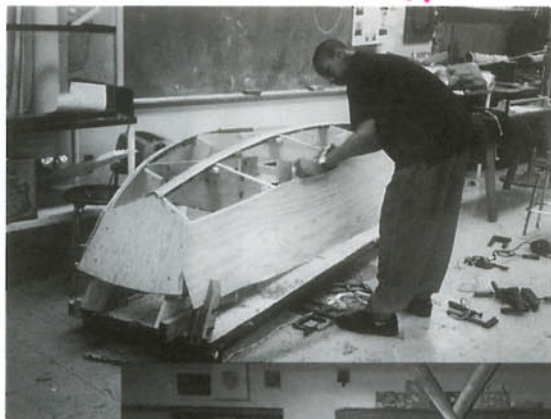


ROCKING THE BOAT

Hands-On Learning in East Harlem



A boat takes shape at East Harlem Maritime School.

Adam Green and his proud boat-builders, confident that their creation will pass the test.



by Adam Green

On a Wednesday morning at the end of June last year, five of us gathered around the pool in the basement of the John S. Roberts School in East Harlem. After eight months of work, during which the plans we had found in a catalog were converted into scaled drawings and turned into wood, our boat was finished. I helped our teacher, Paul Pennoyer, and eighth graders Doloris, Andy, and Mugabe gently lift up the *Dolphin*, a surprisingly beautiful eight-foot rowboat painted black and rimmed with oak, and set it in the chlorine-blue water of the pool for the big test — it floated! Doloris, strapped into a lifejacket, carefully stepped in, grabbed the oars, and rowed off. It was incredible — it really worked. What had a couple of months before been only a dirty pile of old salvaged wood was suddenly floating and moving and supporting a human being. I looked over at the two boys and saw in their faces joy, wonder, and envy. They wanted to try it too. I looked at Paul and nodded a firm approval. Paul smiled back.

Nine months earlier, I had met Paul Pennoyer and about twenty of his kids while working on *Clearwater* as an apprentice for two months. Paul, a sailor and science teacher by profession, had brought the kids up to help during a Pumpkin Sail stop at Roberto Clemente State Park on the Harlem River in the Bronx. The kids were from the East Harlem

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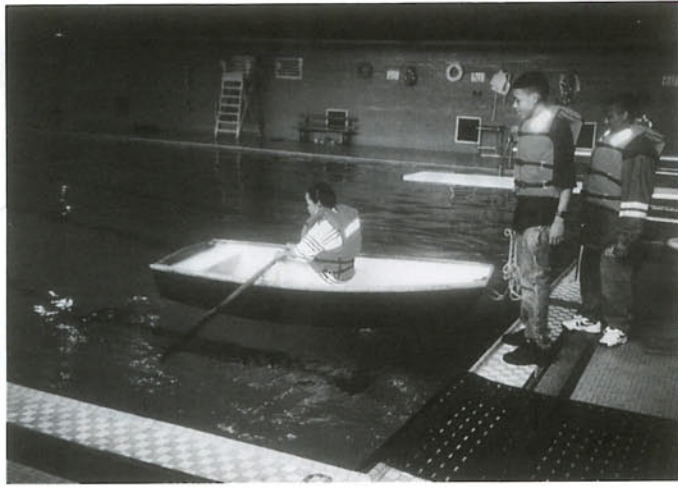
Maritime School, a junior high on 120th Street and First Avenue in Manhattan. Working with them while they served stone soup, sold pumpkins, and helped set up displays, they seemed like a good, energetic group. I watched them as they wandered about the sloop, feeling it rock and bump under their feet. I asked one boy if he had ever been on a boat before. He said he hadn't. Watching their eyes, it seemed to me that by stepping on *Clearwater*, they were experiencing a phenomenon that was outside their comprehension — that such a strange thing as a huge, floating, sailing craft could even exist. At the pool in June, the joy of watching them experience that same feeling of being on a boat was even more incredible — no longer incomprehensible, but instead something that was theirs, that they had created with their own hands.

I had been working on *Clearwater* during a semester off from Vassar College. Soon, I would be getting off the boat with no plans for the rest of the semester. Teaching had been the most rewarding work for me while on the sloop, so I went up to Paul as the Pumpkin Sail was winding down and asked him if he needed help in his classroom. Enthusiastically he said he would. Three weeks later I began working at the East Harlem Maritime School.

During my first visit, Paul told me that one of his dreams was to build a rowboat with some of his kids. Every couple of weeks, he took groups to the SUNY Maritime College under the Throgs Neck Bridge to learn how to row, but he thought it would be great if the kids could actually have the experience of building their own boat. I had worked in carpentry

The Dolphin acs its exam.

that past summer and then spent two months on *Clearwater*, so this prospect sounded wonderful to me. He showed me the plans for an eight-foot rowboat in a catalog, and the following week I walked in to school to find three boys standing around me, waiting to start building.



Eight months later we were at the edge of the pool. The boat had passed the test and we were ready to show it off. That afternoon, Paul, the kids who had worked on the boat, the students of the Maritime School, Pat Prince (the director who allowed the project to happen), a number of school district officials, and I gathered for a ceremony that included speeches, awards, and swimming races. Everyone was impressed; with no experience the kids and I had succeeded in creating what had once been incomprehensible.

The wood we used was mainly scrap that Paul found at a construction site. Our tools were one electric sabre saw, an old electric drill, and lots of hammers, planes, screwdrivers, and sandpaper. One morning a week I would come down from Poughkeepsie and work in the school for about four hours, usually with three different groups of seventh, eighth, and ninth graders. Out of classes of thirty-five kids, four or five would be chosen at a time to come and work with me. Our boat, the *Dolphin*, is now being used every Wednesday for rowing programs in the pool. This year, we're finishing another six-foot dinghy.

Paul and I are planning to start a boat-building program that will be worked into the curriculum as its own separate class. The process of building a boat and then using the product we have created has been an successful experiment in experiential learning. I am teaching these kids geometry not because it is something they "should" know, to be quickly forgotten once the blackboard is erased, but because they need to know it so they can figure out at what angle to bang two pieces of wood together. Then they have in front of them a live, useful sixty degree angle.

Every so often, while I'm trying to explain what a fraction is, a kid will ask me what good it will do to learn this. This question is asked in many classes and seems for the most part to be left unanswered. I ask a question in response: "Look, how are we going to figure this out if we don't know how much one-eighth of an inch is?" This the kids can understand. Though

many of the students at Maritime have low reading and math scores, these kids are no less smart or excited or motivated than any others — they can be turned on academically. Recently, I helped an entire class of seventh graders to begin sawing blocks of wood for the model boats they are building. They were having a great time, with no behavior problems at all. These kids need ways to channel and release their energy.

The East Harlem Maritime School was started in 1972 to provide more experiential learning and possible job training for junior high school students. Because of budget cutbacks and a lack of active support from the district, the maritime-related activities at the school have been reduced to a single maritime studies class twice a week. Today the school has no art classes, no music classes, no shop, and one gym period per week. Though the teachers are trying to engage their students, much of their energy is spent keeping chaos from reigning.

I recently applied for a community service grant to provide funding for the program. Project Sail, a group Paul Pennoyer began in order to fund some of his maritime excursions, is acting as the sponsoring organization. Pete Seeger, who is part of the planning team for "Bronxfest on the Harlem River" at Roberto Clemente State Park this summer, has invited Maritime to take part and show off the *Dolphin*.

For boat-building in public schools to thrive and become a self-sustaining reality, we will need support. We are developing the program as something that is portable and not dependent upon any one institution. The goal is to use boat building as a valid, hands-on alternative method of educating and involving the inner city's children. ■