Chavant News

It's Clay Time
Autumn Dial
Todays Careers
April 24 - 30, 2000
Volume 11
Issue 18

Back in our Play-Doh days, we modeled Hot Wheels out of vivid red and blue putty.

Today, graduates of the Art Institute of Seattle are making careers playing with clay. Through a new partnership with the Ford Motor Company, the Institute's Industrial Design Technology program offers instruction in clay modeling for the auto industry. Car companies are actively recruiting people with this skill as the current population of modelers approaches retirement age.

Picture the rounded curves of the new Volkswagen Beetle, the angled fenders and grille on the 2000 Ford Focus or the organic shape of the latest BMWs. Ever wonder how these cars are created? People who love to play with clay shared their stories at the recent portfolio showing for the Art Institute of Seattle (AIS).

Several students from AIS have graduated to enter the field of clay modeling. They hope to enter internships and jobs with the Ford Motor Company, GM and the like.

"We're just starting out; this is just the tip of the iceberg," says Rob Hasset, an Art Institute graduate. At the portfolio showing of his final project, a collaboration with fellow learner Cameron Mauldin, this annex of AIS is abuzz with faculty, friends and families who have come to view students' creations.

Electric toys, three-dimensional signs, foam dragon heads and beautifully crafted cutlery are all products of the Institute's Industrial Design Technology (IDT) program. Modeling has been done here for years, in many different media, such as plastics, foam and clay. The Auto Clay Modeling program, however, is just being born.

Hasset gestures to the masterpiece, a four foot long, three-hundred pound clay model of a Ford Cougar. The front and rear are complete; the side, lined with chute marks, shows further work to be done. The reddish-brown Chavant clay feels cool and slightly sticky.

"We hadn't worked in Chavant clay before," Hasset proclaims, "but if you mess up, you just start over."

Mold no clay before it's time!

The clay was shipped to the Art Institute in one huge chunk. Half had already been carved by Ford's milling machines and modelers to the shape of the Cougar. The students' job was to precisely duplicate the finished side, creating a complete Cougar model.

They began by heating the clay, an expensive material composed of sulfur, wax and other ingredients. When it has the consistency of Crisco, it is slathered in layers over a foam core, until it is larger than the dimensions of the car.

After it cools and dries, the modelers begin whittling away to the designers' specification, using a frame to measure correct length, width and height. On a full-size model in the factory, computer-operated milling machines do this first step, then professional modelers do the detail work. It takes about one week for five modelers to complete a full-sized clay automobile.

This process was new to AIS students and teachers alike.

"We had to make some of our own tools," says Cameron Mauldin, the student modeler who crafted the rear of the car. He wields a small metal blade and demonstrates how the clay peels off in shavings, much like very soft wood. The shavings are then collected into a ball and reused, because unlike other types of clay,

Chavant does not dry out over time. The material used to make the AIS car was, in fact, recycled from Ford.

Hasset describes the process as a "huge learning curve," because neither students nor teachers had ever done it before. However, they were not entirely on their own. Greg Hutting, chief modeler for Ford Motor Company's West Coast Division, assisted in the team effort, providing hands-on instruction and an introduction to the big business of modeling and making cars.

In the real world, auto manufacturing is a team process. Designers draw the vehicle on paper, engineers provide the technical specifications and the modeler shapes the design in three dimensions. Before a new car ever reaches the assembly line, its interior and exterior have been modeled in clay, complete with exterior paint and installed lights, tires and windows. From even a short distance, these clay models can be mistaken for real cars. Why this long and expensive process?

"It's about body styling, how the light will shine off the vehicle—it's a beauty contest," says Mauldin. Greg Hutting adds that a model is essential, since the cost of bringing a design to the factory line is enormous.

The modelers, designers and engineers work together to make a functional, safe and stylish car. Modelers often contribute their own stylistic vision to the design process.

"We are the visionary, creative side of the project," says Rob Hasset. With the practical instruction and hands-on experience they have received, he and Mauldin hope to be great modelmakers.

The molders of modelers!

The IDT program has existed at AIS since 1985. The program prepares artists to work in many industries, to bring design concepts into palpable, interactive forms. The program description reads, "before a manufacturer commits millions to manufacture.... and promote a product, he wants to touch it."

"Clay modeling is an essential part of most processes," says Vernon Trevellyan, IDT program director.

"We've always done 3-D design and sculpture," he adds, in a variety of mediums including foam and plastic. He appreciates that Chavant clay is a less-toxic substance than those that release dust or small fragments into the air.

In 24 months of training, students in the IDT program create consumer products like toys, outdoor equipment and jewelry; or design furnishings, homes, product packaging and special effects. The aim is to prepare students to move flexibly within these career fields.

Emily Etie, career counselor at AIS, works as a liaison between the design industry and students, helping them with job placement after graduation. In the booming design world, matching the students' interests with employers' needs is a full-time job.

Key employers know her by name, and she even counsels students long-distance from Seattle. She has a humorous take on the skills of the students she represents.

"People wanna see it. They wanna touch it, they wanna feel it," says Etie. Therefore, there is little doubt that graduates of the IDT program will find work. In 1999, the placement rate among its graduates was 85.7 percent.

Greg Hutting, chief modeler for the Ford Motor Company's West Coast Division, explains Ford's intense interest in modeling programs such as AIS'.

"Currently, there is an absence of youth entering the industry," he states. For that reason, Ford has donated over three tons of clay to six Art Institutes across the nation. Hutting himself traveled from California to Seattle twice during the past year to instruct students in auto-modeling technique.

"The students are excited and very energetic," he says. Ford has invested in AIS and other schools to create a pool of young talent, as many currently employed modelers reach retirement.

Why the sudden interest and investment? With the advent of computer technology in the 1980s, the auto industry lost interest in training new modelers.

Computers would eventually run machines that could carve every detail of the auto model. But something was missing in the computer-made cars.

"Computers are a great tool today," says Hutting, "but there's something special that a human brings to the model.... The art background of the AIS students enhances their appreciation of this form."

Chris Stanley, AIS Modeling Instructor, agrees.

"Modelmakers see with a sculptor's eye." Stanley has been a modelmaker since 1973. He is a natural-born teacher with an obvious love for the craft. After many years of modeling and attending school, he found himself in a teaching position at AIS. He brought this background into the partnership with Ford and learned along with the students.

"This is just the beginning for my students, it takes many years to learn the trade," he says. He adds that the students may go on to work with more experienced modelers and learn technique by apprenticeship, saving many years of trial and error.

There is a general shortage of modelmakers in all consumer industry, Stanley says. IDT graduates have been hired by Nokia, GM, Ford, Honda, Bissell and International Harvester, among others.

"This is a new renaissance for clay modelers," Stanley thrills. Indeed, given the enthusiastic support from instructors, staff and industry professionals, the graduates of the Art Institute of Seattle's Industrial Design Technology program seem destined to thrive.

What's ahead for the program? Spring quarter, Hasset and Mauldin's Ford Cougar will be taken apart and new students will begin sculpting a fresh auto design. Learning, troubleshooting, problem-solving and getting their hands into clay.

For further information on the Auto Clay Modeling program at the Art Institute of Seattle, call (800) 275-2471.