Catherine Lindquist, Craftsman/Educator

"I was not going to change their world but change my world."

August, 1948. Lansing, Michigan. A morning familiar to those living in the industrial part of the country, houses surrounding factories, their sounds and smells ever present. In an upstairs bedroom of an old style foursquare, hip roof house, a long time resident of Lansing, Vern Mesler, remembers awaking to a warm August morning. A slight breeze streams through an open screened-in window, and the sounds of hammers, muffled by distance, one and then another, and another. Heavy drop forge hammers that compress and shape hot and cold metal parts for the large Oldsmobile and Fisher Body car assembly plants in Lansing. Large hammers that require the strength and team work of foundry men accustomed to the sound, heat and long hours of industrial work to support a family. John Glendon Lindquist and his father before him worked the heavy industrial machinery that forged their strong work ethic. *"He raised seven kids, raised them on whatever they made back then, without help. Nine of us to feed, three squares a day,"* Lindquist's daughter Catherine would remember years later of a father whom she really never knew then. He was always working. It was a tour through a forge plant as part of a tool and die class that Cathie Lindquist, as an adult, would come to realize why her father was hard of hearing, why he slept as soon as he came home, and how the ever present shop clothing protected him from the metal particles spewed by the large forge hammers. Asked if she considered her father a craftsman, she replies, *"Now that I look back, probably as a kid I didn't see it, but now as an adult I see him as one."*

Cathie Lindquist grew up in Perry, Michigan, about thirty minutes northeast of Lansing's industrial center, and graduated from Perry High School in 1979. Lindquist's experience living in Perry, one of many small Michigan villages settled in the early nineteenth century by tough hard working men and women who farmed and built businesses that brought success to their community, helped shape her values. Further influenced by the demands of a large family, she developed a strong and intense work ethic that would benefit her in the work place and with the high school students she would later teach. *"We were taught you got what you got and that was it. My mom made mine and my sisters' clothes, my brothers wore hand-me-downs. That was part of life. We were always expected to know the rules. Don't be told twice to go do something. That was the way we were raised. It wasn't a matter someone told us, you do it."* Lindquist's parents did what many hard working parents do through unscripted action: they taught their daughter the value of hard work. *"Really, if you want something you have to work for it. You got what you got. I started working at fifteen because of that, if I wanted to have my own stuff. I figured that out when delivering newspapers for one of my brothers."* Her brother's advice: *"Mind your P's and Q's."* At fifteen Lindquist got her first job, making a dollar an hour, and it was clear to her that having a job was as important as the wages she made. *"What you get out of a job, that's more important than the money you made. We all want to make money, and I was taught it didn't matter, it's having a job."*

For years after World War II there were jobs in the Lansing automobile plants. For those who quit school or those who graduated from high school, jobs were available. During those years nearly everyone who graduated from Perry High School hired into GM, but by the time Lindquist graduated in 1979 hiring into General Motors would be difficult. Lindquist's first industrial job was as a braze welder in Fowlerville, Michigan. *"It was kind of scary at first, but growing up with five brothers it didn't bother me for long. It was only women were allowed to braze, the reason was patience. They tried putting men on it but they didn't have the patience, men were not allowed to braze."* There were hazards associated with the job but Lindquist loved the work and welding was a field she took an interest in. *"I liked welding, I loved it."*

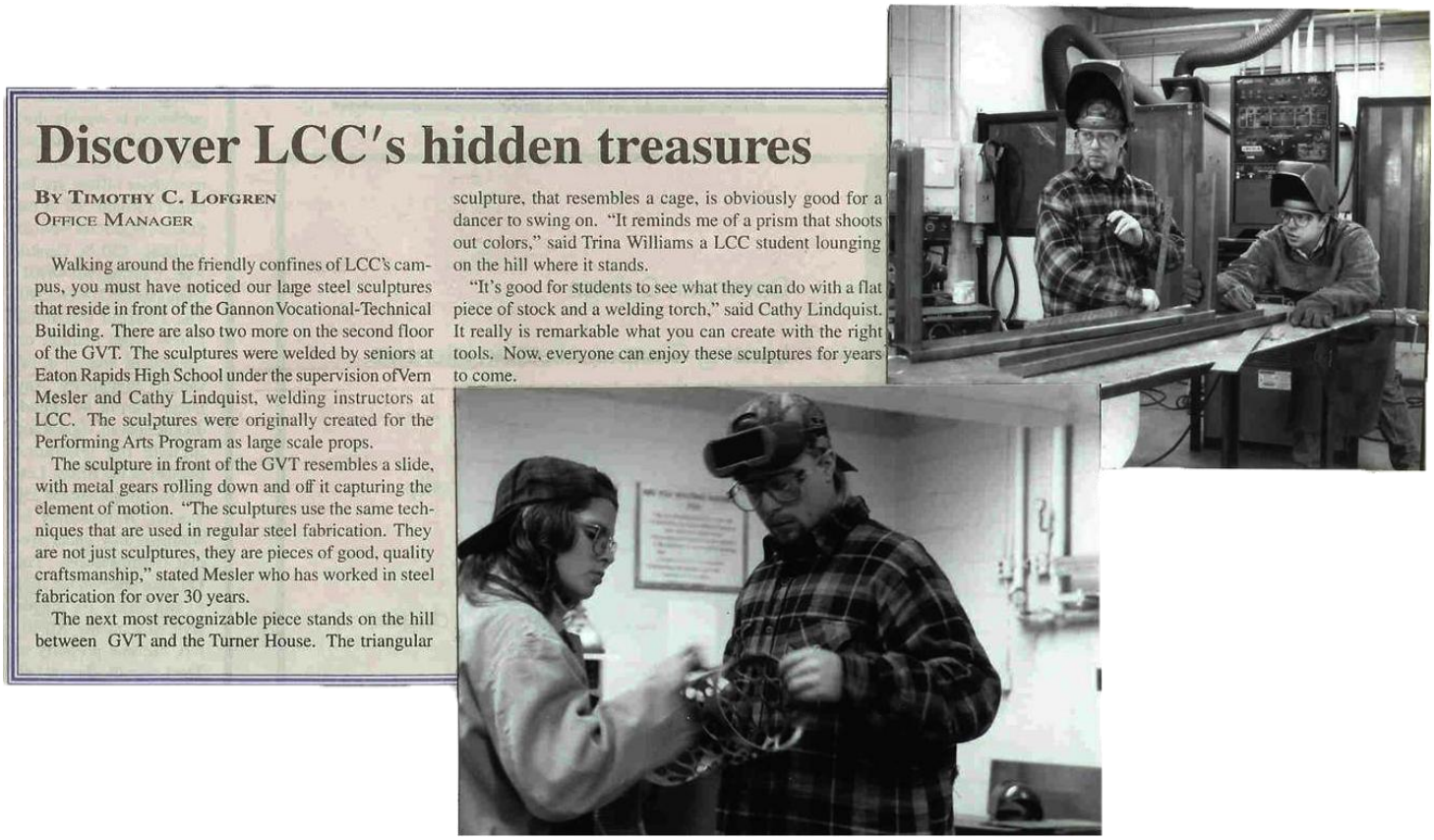
Lindquist continued to work in the welding field and completed an Associate Degree in Applied Science and Welding Technology at Lansing Community College, graduating in 1987. An entry level welding course taught by a former pipe welder and popular welding instructor at LCC, Norm Strayer, taught her valuable lessons about welding instruction and the value of good workmanship. *"When I took my WELD 100, Norm Strayer was my instructor. He was another one of those really scary guys, he'd yell to get his point across but he wasn't lying, everything he told us was true. Like walking over to the scrap bin and seeing a plate only half welded, he wouldn't let it go. He'd stop the class, bring everyone over, wanted to know who threw it in there. He'd explain: if that was [to repair] a hole in the ship are you going to throw it away. This is the place to learn, fix the hole here."* Lindquist considered Strayer a valued mentor in developing her welding and teaching skills, along with welding instructors Bill Eggleston and Vern Mesler. *"I wouldn't be here without them."*

Lindquist's teaching career began in 1994 when she was hired as a Paraprofessional for the Eaton Intermediate School District Career Preparation Center. In September, 1995, she began teaching high school students full time for the EISD program as a welding instructor. *"One thing I learned real quick when I first started teaching kids, in order for them to respect me they needed to know I respected them. I learned that real quick, they would walk all over you. Once we got that established, learning begins."* Author Deborah Norville defines 'respect' in her book **The Power of Respect** as "acknowledging the value and uniqueness of others and being mindful of their feelings, while at the same time trying to put myself in their position." Lindquist learned the importance of respect in teaching through her own work experience with the EISD program. *"I remember being young, it's not easy, and now it's even harder, especially now they're expected to know so much and being that person to go on and be a productive member of society whether they were welding or going out and being a leader somewhere or being in the military. Just knowing they're being someone, I made them understand they had to get along. When they walk through our doors they aren't high school students; they became college students."*

Lindquist and her high school students participated in the 2009 Ferris State University welding contest. Lindquist was also the runner up for Skills USA Advisor of the Year in 2010.

Lindquist's colleagues in the welding department recognized her instructional skills with high school students. Lindquist provided encouragement and extra instruction for those who needed it. In addition, she offered an opportunity for all her students to demonstrate their skills through Skills USA competitions. For Lindquist the payoff is the moment they get it, the moment they perform at a craftsman's level. *"Aw, I got it seeing that smile. You see it in adults, too, but in kids it's different. They were told never make a mistake, and I said make mistakes. I feel that's how you learn to weld. If you do it right all the time, you're not going to learn."*

An appreciation for art and the artist led to metal sculpture projects that gave Lindquist's high school students a chance to develop metal fabrication skills and an appreciation for art.



Discover LCC's hidden treasures

By Timothy C. Lofgren
Office Manager

Walking around the friendly confines of LCC's campus, you must have noticed our large steel sculptures that reside in front of the Gannon Vocational-Technical Building. There are also two more on the second floor of the GVT. The sculptures were welded by seniors at Eaton Rapids High School under the supervision of Vern Mesler and Cathy Lindquist, welding instructors at LCC. The sculptures were originally created for the Performing Arts Program as large scale props.

The sculpture in front of the GVT resembles a slide, with metal gears rolling down and off it capturing the element of motion. "The sculptures use the same techniques that are used in regular steel fabrication. They are not just sculptures, they are pieces of good, quality craftsmanship," stated Mesler who has worked in steel fabrication for over 30 years.

The next most recognizable piece stands on the hill between GVT and the Turner House. The triangular sculpture, that resembles a cage, is obviously good for a dancer to swing on. "It reminds me of a prism that shoots out colors," said Trina Williams a LCC student lounging on the hill where it stands.

"It's good for students to see what they can do with a flat piece of stock and a welding torch," said Cathy Lindquist. It really is remarkable what you can create with the right tools. Now, everyone can enjoy these sculptures for years to come.

An article in the LCC student newspaper **The Lookout** describes one metal sculpture project where Lindquist's Eaton Rapids High School seniors in 1997 took part in the fabrication of five metal sculptures for the LCC dance program. (Two of the metal sculptures remain on LCC's main campus in downtown Lansing.) Metal fabrication requires the use of the hammer, and this is Lindquist's favorite tool. *"Being a female you need that extra help. I learned that in the machine shop. It's called the friendly persuader. And working with you [Vern Mesler], you taught me you could do anything with metal, and beating it with the hammer you could do anything."*

When Bill Eggleston retired in 2011, Lindquist took over the lead welding instructor position at LCC. She recognizes Eggleston's many contributions to the LCC welding program and appreciates the highly qualified welding staff Eggleston left behind. *"We have a great team, everyone works great together, and everybody does what you ask."* Lindquist's goal is to build on the welding program by incorporating more welding robotics and automated metal fabrication process training. She strives to develop skilled workers who can program and operate automated welding processes, read prints, apply math skills, and make precise measurements of welded connections. Lindquist recognizes, as many in the industrial community do, that there is a skill gap* in the United States and that companies are looking to community colleges to help fill that gap.

Catherine Lindquist is a skilled craftsman and educator. *"My dad wouldn't really talk about his work. One day he tried to give me his Journeyman card, but I couldn't take it. I think it was a way of him telling me he was proud of me."*

***Three million open jobs in U.S., but who's qualified? Byron Pitts reports** *60 Minutes Skill Gap*