



Ernie Parker

*Instructor of Fluid Power Engineering Technology
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When Ernie Parker is asked when he might retire, this master teacher of 35 years at Hennepin Technical College laughs. "How can I retire? I haven't accomplished all the goals I've set for myself." His accomplishments to date, however, are numerous: Ernie teaches 12 different classes, holds 23 certifications and licenses, fosters collaborations with local high schools, industry and universities, and has

educated students who pass national certification exams with scores far above the national average.

Everything Ernie does is rooted in how he values career and technical education—specifically, manufacturing—as the foundation of successful communities. The motto of his program is "hire" education: an education that creates opportunities for employment. Parker wants his students to succeed, and their success, he believes, is dependent upon his taking the time to do more than convey information. If a student, for instance, is repeatedly tardy, he intercedes to find the source of the problem: is it motivational, a matter of laziness, or is there a genuine lack of interest? If there's lack of interest, why? Are the student and program a good match, or does the problem have to do with understanding course content? He wants to know, because he wants "every student to succeed, and it is so important that the course and program outcomes relate to their experiences." Parker believes that as teachers we "need to stay alert and be involved with our students." He strives to treat them as if they were a part of his family, and he provides not only instructional help but opportunities for them to learn about an industry in which he is expert and well-connected—all so that they can succeed with their goals and dreams.

Parker's influence extends well beyond the classroom. Not only does he provide expertise to his students in the fluid power program, he also delivers industry training to local, regional and national manufacturers. He is actively involved in the college's service activities: assisting with college tours, dedicating time to the college's foundation fundraising efforts, and helping students at local high schools with their high-tech activities. He is a member of the Shakopee and Lakeville advisory boards, past president of the International Fluid Power Society and student advisor for Skills USA. In 1988 he was the recipient of the International Fluid Power Society National Educator of the Year Award.

Ernie Parker sets high standards for himself and his students. He is dedicated to maintaining his professional industry credentials to ensure he is always offering the most up-to-date curriculum. He is a proponent of applied learning techniques and team learning. He believes effective teaching and learning rely on reflection and action. "I am always curious about how my students learn, and if given the chance, they are helpful in telling me what helps them." His students'

words describe him best: “enthusiastic, energetic, inspirational: he asks a lot of us, but he asks that we ask even more of ourselves.”

REVIEWER COMMENTS

Parker’s teaching methods reflect a learning-centered instructor who uses a variety of teaching tools—online and distance education, team-learning, real-world problem-solving, and a required capstone project. His core approach to his teaching stems from his belief in learning as a result of reflection followed by action. And his syllabi demonstrate how he structures that learning process. His adherence to industry standards makes high demands of his students, and helps form and inform his commitment to student retention.

The content and professional expertise that Parker brings to his teaching is seen through his networking with industry to understand the changing demands of employees. He has served as a team leader for Hennepin Technical College’s manufacturing program and is an active member of the Society of Automotive Engineers and the American Society of Mechanical Engineers. He holds a combined 23 certifications and licenses (hydraulic mechanic, fluid power specialist, radar technician, State of Minnesota electrical license, among them) and his hydraulic-hybrid engineered vehicle was featured in national magazines.

Parker serves his students and his college by fostering high school collaborations working with such initiatives as Project Lead the Way; Science, Technology, Engineering, and Mathematics; and the Forum for Incident Response and Security Teams. He serves as an advisor, provides college tours for prospective students and parents, and established a working relationship between Hennepin Technical College and the fluid power industry and the Science Museum of Minnesota. He works actively with the Hennepin Technical College Foundation and serves as a fundraiser for student scholarships, collaborates with the Minnesota Precision Manufacture Association, and helps prepare students for robotics competitions known as BattleBots.

Parker’s careful assessment of and commitment to student learning is most evident in his use of capstone projects. In these required projects, students must show evidence of the principles they have learned in real design work and production. He is a proponent of team presentations and feedback loops, and uses a cycle of continuous improvement (curriculum design, classroom and online instruction, assessment of learning, reflection, curriculum redesign) to structure and continually assess his courses. His program’s students pass national certification exams with scores far above the national average: pass rate for hydraulic specialist was 96 percent, compared to national average of 65 percent; pneumatic specialist pass rate was 85 percent, compared to 40 percent national average. He is justifiably proud of former students who not only work in industry, but have secured patents after completing the program.