

Biography of Mary Acken, PLTW & Electrical Engineering Teacher

Mary Acken has over 26 years in the engineering industry. She is bringing her computer and electrical engineering experience and knowledge to the Electrical Engineering classrooms of the Engineering Institute at Lyman High School. Mrs. Acken became an adjunct faculty at Valencia College in order to provide dual enrollment for students of Lyman's Electrical Engineering studies. She also brings experience in educational programs for K-12 students in Science, Technology, Engineering and Mathematics (STEM).

Mary Acken graduated with a Bachelor of Science in Computer Engineering and completed software engineering graduate level coursework in simulation from the University of Central Florida. Mrs. Acken worked for over 26 years in engineering, with various sized engineering businesses. She worked at AAI Corporation on the Remotely Piloted Vehicle –Institutional Trainer (RPV-IT) with the real-time peripheral input/output (I/O) system: designing the hardware panels; supervising the engineering technicians assembling the initial prototype hardware; and designing firmware for I/O control. She also performed hardware and software integration for the 14G2 Sonar Equipment Maintenance Trainer at AAI. She modeled real-time avionics programs and designed a record/playback system for the A6/F14D Weapon System Trainer at AAI. Mrs. Acken designed, developed, and integrated the avionics data bus and mass storage devices with the operational flight program, and led design and test teams in the avionics lab for Northrop Corporation, B2 Division. Employed at SBS Technologies, Mrs. Acken developed C-programs and firmware for an MH-60G for the Air Force Special operation Forces simulator; designed object oriented programs for the Space Station's Master Object Data Base; and designed, developed and integrated systems for a Canadian F-5 Operational Flight Trainer.

Mrs. Acken's written training materials and guidelines for educators, and implemented classroom and community education programs in Seminole County, Orange County, and across the nation. Mrs. Acken is co-author of Learning to Read by Topic: Chess and the accompanying workbook. She has integrated Science, Technology, Engineering and Mathematics (STEM) for K-12 and community educational programs, including district wide training for STEM in Pinellas County. Mrs. Acken has 11 years as a volunteer for Seminole County Public Schools (SCPS Dividend) with 6 years as a Certified SCPS Mentor.