Sue Glover Mottinger completed her undergraduate studies at Texas Western College (now UTEP) in 1965 with a Bachelor of Arts in Physical Education. She began her career as a teacher in school districts around El Paso, Texas and parts of New Mexico. Mottinger then continued her studies, receiving both master's and PhD degrees from Texas Woman's University. The basic principle of access to opportunity, ingrained in Dr. Mottinger during her academic career, was integral in shaping her development and preparing her for future roles as a change agent in the world of physical education and a champion for women's equality in the classroom and in sports competitions.

During the late 1980s, Mottinger marched in the streets of Washington, D.C. and lobbied for the successful passage of the Civil Rights Restoration Act of 1987, which restored equal opportunities for women in education and included amendments to Title IX regulations that prohibited gender-based discrimination. UTEP's mission to provide access to excellence in higher education for all residents of the Paso del Norte region still resonates strongly with Mottinger. In 2013, she created the Sue Glover Mottinger, Ph.D. Endowed Scholarship to support students majoring in kinesiology and to provide access to enriched educational experiences for future generations of UTEP Miners.