

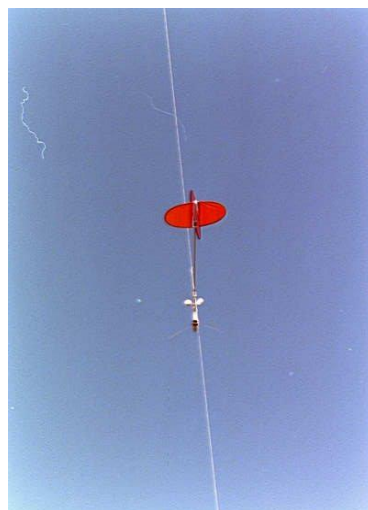
My academic training is in physics ([BS with Honors at the University of Southampton, UK](#)) and meteorology ([MS at the University of Reading, UK](#)) and I have 24 years experience teaching physics and physical science, including 9 years with MCCC. I arrived at Glendale Community College in August, 2005, after 15 years at Grand Canyon University (GCU) here in Phoenix. At GCU I taught physics and physical science, advised pre-engineering students, held key leadership positions on campus, and contributed in numerous ways to the life of a Liberal Arts University. I served as Faculty Chair, a position elected by the entire faculty body to lead the Faculty Council and I was the appointed sponsor for the Arizona Alpha chapter of [Alpha Chi](#), a collegiate honors program for academically qualified students in all disciplines.

My experience with teacher education programs began at GCU where I taught physical science to Elementary Education students. It was mandatory for students to take my class and it showed in their high success rates on the AEPA. My physical science class at GCC is also designed for Elementary Education students and covers roughly 40% of the AEPA math and science on the Elementary education content exam. I have served on the Arizona Department of Education Content Advisory Committees for Middle Grades General Science and Secondary Level Physics so I am very familiar with the rigor of these two tests.

My academic research has involved students in three major studies: the Educational Testing Service study to determine the correlation between college student scores in General Physics and high school student scores on the SAT II Physics subject test; and the [Harvard FICSS \(Factors Influencing College Science Success\) study](#) to correlate college achievement in physics with years of high school physics. In both studies I was the lead person at GCU and for the latter study I have access to preliminary results. I was also the lead GCU investigator in [PAFEX- I](#), a two-year NSF project (with ASU) to study pollutants and their diurnal variation in the Phoenix valley metro area.



Filling the balloon prior to a data run on the GCU field just north of campus.



Balloon with instrumentation.

Photos courtesy Dr. Neil Berman, Arizona State University

One of the most exciting and innovative projects I have participated in recently is the renewal of the general education curriculum at GCU. The freshman class in the new curriculum is a team-taught multidisciplinary course where faculty mentors lead discussions on the big three questions in life: Who am I? Why am I here? Where am I headed? I was the course developer and lead professor for the Why? component and I used the class as an opportunity to model holistic learning and reduce compartmentalized thinking. In Spring 2005 I led a panel discussion on my preliminary findings at the [*Pedagogies of Engagement: New Designs for Learning in and across the Disciplines*](#) conference in Chicago hosted by the [Association of American Colleges and Universities](#).



Singing in English helps learning!

Most summers I lead a team of professors to teach English as a Second Language at the [Vilnius Pedagogical University](#) in [Lithuania](#).



Here at GCC, I am the past Assistant Chair of Physics, I teach Introductory Physics and Physical Science, I am the faculty advisor for the [Glendale Environmental Club](#), and I am an enthusiastic recycler and member of [Green Efforts](#). At the college level I am a Faculty Senate member and serve on the Faculty Executive Council. Most summers I teach English as a Second Language at the [Vilnius Pedagogical University](#) in [Lithuania](#).

I began my career in the physical sciences working for the [Meteorological Office in England](#). I was recruited from my graduate studies to pursue government research modeling thunderstorm dynamics, principally as they affect supersonic flights e.g. Concorde; analyzing correlation data for the [Thames Barrier project](#) in London, England; forecasting weather at the [London Weather Centre](#) for newspapers and TV; and directing an experiment to determine if incorporation of fake data in the 10-level numerical forecast model could produce better 24 and 48-hour weather forecasts. (It does!) This practical research experience in a government laboratory introduced me to the value of collaborative decision-making on team projects, and has served as excellent preparation for all my teaching and committee work.