

BIOGRAPHICAL SKETCH

Sandra H (Moeller) Feder

Degrees M.S. Mathematics (Computer Science) • University of Nevada, Reno June 1984 with Highest Honors, first graduating female with a degree in computer science
California Teaching Credentials • Ryan • Single Subject Credentials Mathematics, Humanities-English, Home Economics
California Teaching Credentials • Fisher • Mathematics K - 12, June 1973
B.S. Mathematics • University of California, Davis June 1972

Awards Phi Kappa Phi at graduation from University of Nevada, Reno, June 1984

Grant Participation • Ford Foundation Grant

US-China Education Foundation • Community Colleges in China Project • 1999
Grant to help the Chinese people meet their ten year goals by educating more adults through a community college system. Worked with eight Universities to help them start the first community colleges in China. Seven started community colleges.

Experience: (Selected)

Teaching Experience

Instructor • Sacramento City College • 1997 to present

3835 Freeport Blvd, Sacramento, CA 95822
Taught Computer Science as a full time instructor. Faculty Tri-Chair - Information Technology
Taught mathematics part-time as needed
Committee . Member - Budget Committee. Member - Tech Force and Tech Force 2000.

Instructor - San Joaquin Delta College - 1995 to 1997

5151 Pacific Ave, Stockton, CA 95207
Taught Computer Science as a full time instructor.

Graduate Fellow - Department of Mathematics, University of Nevada, Reno 1981-1983

Taught mathematics courses while completing master's degree in computer science

Instructor - Mathematics - California State University, Sacramento 1979-1980

Mathematics and ESL teacher - Fairfield High School, Fairfield, CA 1977-1980

Co-author of Individualized Mathematics Learning System, Member IEP Team, started the ESL program at the school

Mathematics Teacher - Loretto High School 1976-1977

2360 El Camino Ave, Sacramento, CA 95821
Taught High School Mathematics

Project S.E.E.D. (Special Elementary Education to the Disadvantaged)

Discovery Mathematics Teacher - University of California, Berkeley 1970 -1973
Taught discovery algebra to underprivileged children in grades 1 to 4 as an undergraduate math major.

Computer Science Experience

Computer Systems Analyst/ Programmer • Sprint 1993-1995
Sprint, 2868 Prospect Park Dr, Rancho Cordova, California 95670

Project Manager Manufacturing Systems / Computer Systems Analyst - 1986-93
GenCorp Aerojet TechSystems • Highway 50 & Aerojet Road Rancho Cordova, CA 95670
Computer Systems Analyst / Programmer - TRAC Systems, 1984- 1986

Honors: 4.0 average in graduate school
Graduate Fellowship – University Nevada, Reno
Phi Kappa Phi – Life Member

Certificates: California Standard Secondary Teaching Certificate – Life – Mathematics
California Single Subject Teaching Certificate – Math, Humanities-English,
Home Economics
APICS – American Production and Inventory Control Certification – while
working for Aerojet TechSystems Corporation

Organizations – American Mensa Sacramento Chapter– Current Webmaster & Data Custodian
JSPAC- Joint Special Populations Advisory Committee
Folsom Lake College – CPATH Grant Team committee
STEM Summit attendance – Sacramento CA
Convergence Conference Attendance
Closing the Achievement Gap Summit – Sponsored by Jack O’Connell and the
CA Dept of Education
BITREC – Business and Information Technology Regional Educational
Consortium
IMPAC member three plus years
AAUW- American Association of University Women

This is my story. It explains how lucky I have been and why I am applying for this grant.

Sandra Feder is a first generation American who was born and raised in the Los Angeles area. After graduating from High School, she started college at the University of California at San Diego. Her father and the state of California supported her in college so that she did not have to work while being in college full-time. She remembers being the only woman in physics classes and remembers what Dr Edward Teller taught her in his physics class. After two years, she transferred to the University of California at Davis where she would be able to take the classes required for a teaching credential. During her years at Davis, she learned to teach discovery algebra to students from low-income families through Project SEED (Special Elementary Education to the Disadvantaged). She earned her B.S. Degree in Mathematics in June 1972. Then, she earned her California Teaching Credential in mathematics and humanities-English in June 1973.

After graduation, she spent two years substitute teaching, and then got a full time teaching job at Loretto High School in Sacramento. Following that, she began teaching at Fairfield High School where she partnered with another teacher to develop an individualized arithmetic program to help high school students prepare to pass the district exit exam. Fairfield High School did not have an ESL program, so she gathered together the ESL students and began teaching the first ESL class. She became the mathematics member of the student evaluation (IEP) team who would help students who had "special needs".

After a move, and birth of a child, she began to work on her master's degree in computer science at the University of Nevada in Reno. She was awarded a Graduate Fellowship and taught math classes at the University as she worked on her Master's Degree. Even though she wondered if she could be a mother, teacher, and graduate student at the same time, she managed to do so. She was the first woman to earn a Master of Science degree in computer science at the University of Nevada, Reno. During the graduation ceremony, she nursed her new baby. She knows what it feels like to be a working mother and college student at the same time.

After a move back to Sacramento and a divorce she worked as an outside contractor for a company writing a medical software package. In this position, she was able to care for two small children as she wrote the first commercially available DRG grouper in the United States. Later, she was the only programmer for a small software company that designed exams, did statistical analysis of exam data, and wrote software for city, state and county governments. In the two years she worked for that company, she made a huge impact on the company by writing manuals for the software and helping to expand the business by 300%. Her next employment was for Aerojet TechSystems where she was a systems analyst and the project manager that took the company from paper and pencil manufacturing to an MRP II automated system. That large and expensive project saved Aerojet money within nine months of its installation. During these seven years at Aerojet, she taught Adventures in Aerospace classed at a local elementary school to fourth, fifth and sixth grade classes. She spent two more years in industry as a team leader and project manager for Sprint.

Since she missed teaching, she went to work at San Joaquin Delta Community College as a computer science professor. Two years later, she transferred to Sacramento City College where

she has been teaching computer programming and Web page development for eleven years. She loves being able to teach students how to be creative and be able to design and program software systems.

In July 1999, she was honored to be selected by the US-China Education Foundation as their computer science representative to the Community Colleges in China Project. She spent five weeks in China helping eight Chinese Universities start their own community colleges. This was a Ford Foundation Grant to help the Chinese people meet their ten year goals by educating more adults through a community college system. She learned a lot about freedom and the value of education as she assisted seven of the schools to open community colleges. She sees equal access to college (for all people) as a critical part of building a strong economy and a large healthy middle class.

She began working on this Broadening Participation in Computing grant in fall 2006 after hearing about the Center for STEM Excellence (Contra Costa College) at a BITREC seminar. She started by finding outreach opportunities where she could speak to students at feeder High Schools and junior highs. At each school, she became friends with faculty and administration. She joined JSPAC to learn as much about educating disadvantaged students as possible. Through JSPAC she attended a lecture by Ruby K. Payne on “A Framework for Understanding Poverty”. She was so inspired by this, that she began attending every event that seemed related to computer science, women, under-represented minorities, the STEM pipeline, the Achievement Gap, “Rising Above the Gathering Storm”, and the Perfect Storm. As she attended events, she made friends from others who declared an interest in doing something about the problems.

In spring 2007, she invited all these new friends to attend a meeting to talk about a Grant (Broadening Participation in Computing grant) that she had just discovered. The entire group showed up at that meeting! The large team of about 25 people began brainstorming and wrote the grant. The team includes teachers and administrators from Sac City Unified School District, from Sac State University college of Engineering and Computer Science, UC Davis dept of Computer Science, Intel, Linking Education and Economic Development (LEED), Sac City College Outreach Office, SCC Financial Aid office, SCC EOPS, and the Los Rios District Office. This grant is the result of the teamwork of this fabulous group of people whose hearts are in the right place. This is the right thing to do, the right time to do it and the right city and college to make it happen.