

CE269	Advanced Topics in Structural Design	Graduate elective
CE298	Special Problems	Graduate elective

Innovations in Teaching

Assessment Rubric Design

Development of a nine-step evaluation rubric for engineering student skills in the design of experiments. Rubric developed by four-member team from CEE, GE, MAE and CME department faculty. 2007-2008

Technology-Assisted Instruction for Engineering Education

CE265 – Flipped classroom instruction modules	Fall 13
CE265 – Online asynchronous instruction	Fall 99
CE267 – Two-way video instruction	Spring 98
CE164 – Two-way video instruction	Spring 97

Member of the COE Champions team 1997-2000. Exploring implementation of new technologies to enhance student learning. Developing effective teaching methods via distance education and multimedia tutorials.

New Courses Developed

CE20 – Fall 2000. This course was the permanent replacement of CE96D. While refining the course material, some alterations of the course were initiated. The project was altered to require the students to draw a multi-sheet set of plans for an existing civil engineering project to allow them better understanding of a complete set of drawings for a large-scale civil engineering project. Initial projects have included Hoover Dam and Grand Tetons Dam. To provide the student with additional resources for study, a reader was assembled.

CE96D – Fall 1998. The faculty of my department decided that a new course was necessary to introduce students to the AutoCAD computer graphics software. In addition, the course would teach manual drafting, freehand sketching, and geometric projection. The idea behind the course intrigued me and so I volunteered to organize and teach the material. I organized the curriculum, collected teaching materials, and learnt the AutoCAD program. I developed a complete set of course notes, textbook materials, and assignments for the students to learn a variety of drawing skills.

CE269 – Spring 1998. I taught a new offering under the CE269 seminar course. This new course managed the design, construction, testing and reporting of experiments in the Structural Engineering laboratories. Teaching this class fulfilled one of my department's goals: to develop an innovative graduate class in structural engineering design. For this course, I wrote a student reader that was used as the basis of the experiment's final report. Besides providing the students with the relevant materials, this reader also included an extensive bibliography and formatting requirements for the report text and graphics that the students were to use for their final report. I organized the student research teams, coordinated the testing programs, and oversaw the student work in the fabrication shops. At the time of experimental testing, I was responsible for the test protocol, the review of the final data, and assisting students in interpreting the data for their individual research projects. At the conclusion of the course, I organized a student poster session for the students to present their work.

Research Initiatives

Solar-Powered Transit Systems	2012-2013
Green building technology	2006-2013
Enhancement of engineering preparation at the K-12 grades	2002-2013
Performance based design of building cladding systems	1998-2013
Seismic behavior of light frame shear wall buildings	1998-2011
Seismic behavior of steel beam-to-column subassemblies	1998-2001
Monitoring of seismic behavior of full-scale buildings	1996-2001
Ductility of welded steel joints	1996-1999
Ductility of steel anchorage systems	1996-1997

Kurt McMullin, P.E., Ph.D.	Consultant	1991-present
Evaluation of various engineering structural systems for performance goals		
Forensic engineering for legal proceedings		
Analytical evaluation of complex structural systems		
Projects:		
Engineering Tutoring for Advanced Steel Design		2013
Peer Review of a Highrise Structure in San Francisco		2012-2013
Review of a Highrise Structure in Tokyo Japan		2011
Peer Review of a Highrise Structure in San Francisco		2003
Forensic Evaluation of a Woodframe Housing Development		2001-2005
Forensic Evaluation of a Woodframe Housing Development		1999-2000
Consultant for Residential Seismic Retrofit Work		1998-2000
Analysis of a Water-Collection Basin		1998
Steel Frame Test Facility		1995
Kajima Corporation, Minato-ku, Tokyo, Japan	Summer Intern	1993
reviewed current technology for seismic resistant buildings		
toured Japanese construction projects		
internship sponsored by National Science Foundation		
Middlebrook and Louie, San Francisco, CA	Design Engineer	1989-1996
engineering design calculations		
linear dynamic and static building analysis via computer simulation		
review of shop drawings and construction work		
review and training of engineers		
coordination of engineering and architectural plans		
preparation of written responses to peer review, requests for information, and field change orders		
Halliburton Services, Duncan, OK	Senior Engineer	1982-1985
design new equipment for the petroleum industry		
write material specifications		
approve engineering and manufacturing change orders		
manage research and development projects		
layout preliminary drawings using CAD software		

Publications.

Books, Patents

Lindeburg, Michael R. and McMullin, Kurt M. (2011). *Seismic Design of Building Structure: A Professional's Introduction to Earthquake Forces and Design Details, 10th Edition*. Professional Publications, Inc., Belmont CA.

Lindeburg, Michael R. and McMullin, Kurt M. (2008). *Seismic Design of Building Structure: A Professional's Introduction to Earthquake Forces and Design Details, 9th Edition*. Professional Publications, Inc., Belmont CA.

Astaneh-Asl, Call, Steven M., and McMullin, Kurt M. (1990). *Steel Tips: Design of Single Plate Shear Connections*, American Institute of Steel Construction.

McMullin, K. M. (1986). "Remote Cementing Plug Launching System." – U.S. Patent #4,624,312.

Peer Reviewed Journals

McMullin, K. M.; Merrick, D. S. (2007). "Seismic damage thresholds for gypsum wallboard partition walls." *Journal of Architectural Engineering*, American Society of Civil Engineers. v 13, n 1, 2007, p 22-29.

- Baldizan, M. E. and McMullin, Kurt M. (2005). "Evaluation of student learning for an engineering graphics course." *Journal of Professional Issues in Engineering Education and Practice*, American Society of Civil Engineers. v 131, n 3, July, 2005, p 192-198.
- McMullin, Kurt Michael; Astaneh-Asl, Abolhassan. (2003). "Steel semirigid column-tree moment resisting frame seismic behavior." *Journal of Structural Engineering*, American Society of Civil Engineers. v 129, n 9, p 1243-1249.
- McMullin, Kurt Michael; Owen, Gordon Norman. (2002). "Educating students via distance learning for civil engineering design." *Journal of Professional Issues in Engineering Education and Practice*, American Society of Civil Engineers. v 128, n 1, January, 2002, p 6-11.
- Astaneh-Asl, Abolhassan; Modjtahedi, Djavah; McMullin, Kurt; Shen, Jie-Hua; D'Amore, Enzo. (1998). "Stability of damaged steel moment frames in Los Angeles." *Engineering Structures*, v 20, n 4-6, Apr-Jun, 1998, p 433-446.
- Astaneh-Asl, Abolhassan; McMullin, Kurt M.; Call, Steven M. (1993). "Behavior and design of steel single plate shear connections." *Journal of Structural Engineering*, American Society of Civil Engineers. v 119, n 8, p 2421-2440.
- Astaneh, Abolhassan; Call, Steven M.; McMullin, Kurt M. (1989). Design of single plate shear connections." *Engineering Journal*, American Institute of Steel Construction, v 26, n 1, p 21-32.

Conference Papers, Reports

- McMullin, Kurt M., Takhirov, Shakhzod, Gunay, Selim, Yarra, Siddaiah, and Tai, Eugenia (2014). "Scanner technology for documentation of displacement states of experimental test specimens." *Proceedings*, 2014 National Conference for Earthquake Engineering, Earthquake Engineering Research Institute. Anchorage, AL, July.
- McMullin, Kurt M., Ortiz, Maggie, Yarra, Siddaiah, Nagar, Pooja, Patel, Lokesh Tu-An Ma, and Tai, Eugenia (2014). "Static experimental testing of precast concrete cladding for building facade systems." *Proceedings*, 2014 National Conference for Earthquake Engineering, Earthquake Engineering Research Institute. Anchorage, AL, July.
- McMullin, Kurt M. (2014). "Engineering Education Outreach from Two NEESR Research Projects." *Proceedings*, 2014 National Conference for Earthquake Engineering, Earthquake Engineering Research Institute. Anchorage, AL, July.
- McMullin, Kurt M. (2013). "Defining fracture limit states of coil rods for precast concrete cladding panels." *Proceedings*, 2013 PCI Convention and National Bridge Conference, Precast Concrete Institute. Grapevine, TX. Sept. 21-24.
- McMullin, Kurt, Anagnos, Thalia, Hustler, Jan and Thomas, Nancy (2013). "Professional development of university engineering faculty through a math-science partnership." *Proceedings*, Annual Meeting of the Pacific Southwest Branch, American Society of Engineering Education. Riverside, CA, April 18-20.
- McMullin, Kurt M. (2012). "Full-scale dynamic testing of precast concrete cladding panels." *Proceedings*, 2012 PCI Convention and National Bridge Conference, Precast Concrete Institute. Nashville, TN. September 29-October 1.
- McMullin, Kurt M. and Rai, Kathi (2012). "Adaptive reuse of precast concrete building cladding panels." *Proceedings*, 2012 PCI Convention and National Bridge Conference, Precast Concrete Institute. Nashville, TN. September 29-October 1.

- McMullin, Kurt M., Ortiz, Maggie, Patel, Lokesh, Yarra, Siddaiah, Kishimoto, Tatsuo, Stewart, Caleb, and Steed, Bob (2012). "Response of Exterior Precast Concrete Cladding Panels in NEES-TIPS/NEES-GC/E~Defense Test on a Full-Scale 5-story Building." *Proceedings*, 2012 Structures Congress, ASCE. Chicago, IL. March 29-31.
- McMullin, Kurt M. and Ortiz, Maggie (2011). "Experimental testing of precast concrete cladding for building facade systems." *Proceedings*, 2011 PCI Convention and National Bridge Conference, Precast Concrete Institute. Salt Lake City, UT. October 22-25.
- Le, Thuy and McMullin, Kurt (2008). "Cyberinfrastructure Development for Design and Testing of Nonstructural Building Components." *14th World Conference of Earthquake Engineering*. Beijing, China, October.
- McMullin, Kurt and Merrick, Dan (2008). "Post Earthquake Investigation of Wood Buildings." *2008 Structures Conference*. American Society of Civil Engineers. Vancouver, British Columbia.
- Anagnos, T., Komives, C., Mourtos, N. and McMullin, K. M. (2007). "Evaluating student mastery of design of experiments." *Proceedings*, 37th Frontiers in Education, American Society of Engineering Educators. Milwaukee, October 10-13.
- Anagnos, T., and McMullin, K. M. (2006). "Integrating NEES research into advanced analysis and design courses." *Proceedings*, 8th National Conference on Earthquake Engineering. San Francisco, April.
- McMullin, K. M., Choi, C., Chan, K. and Wong, Y. (2004). "Seismic performance states of precast concrete cladding connections." Oral Presentation *13th World Conference on Earthquake Engineering*. Vancouver, B.C. Aug.
- McMullin, K. M., Wong, Y., and Kwong, A. (2003). "Damage thresholds and performance levels of precast cladding systems." *Proceedings of Seminar on Seismic Design, Repair and Retrofit of Nonstructural Components on Critical Facilities*, Applied Technology Council Project 29-2, Los Angeles, April.
- Astaneh-Asl, A.; Liu, J.; McMullin, K.M. (2002). "Behavior and design of single plate shear connections." *Journal of Constructional Steel Research*, v 58, n 5-8, May-August, 2002, North American Special Issue, p 1121-1141.
- McMullin, K. M., and Merrick, D. (2002). "Damage Thresholds and Repair Costs for Gypsum Wallboard Partition Walls." *2nd Structural Engineering World Congress*. Yokohama, Japan. Oct.
- McMullin, K. M., Duquette, S., Leavitt, J., and Grottkau, M. (2002). "Engineering Evaluation and Risk Mitigation Program for Single-Family Residential Construction: the California SAFER Program." *Proceedings*, 7th U.S National Conference on Earthquake Engineering. Boston, MA. July.
- McMullin, K. M. and Merrick, D. (2002). "Seismic Performance of Gypsum Walls – Testing." Final report to the CUREe-Caltech Woodframe Project.
- McMullin, K. M. Nguyen, L. A., Vazquez, H. and Nguyen, Q. H. (2001). "Distribution of Strain Ductility in Hot-Rolled Steel Shapes." *Second International Conference on Engineering Materials*. San Jose, CA. August.
- McMullin, K. M. and Merrick, D. (2000). "Seismic Testing of Light Frame Shear Walls." *World Conference on Timber Engineering*. Whistler, British Columbia. July.
- McMullin, K. M. and Astaneh-Asl, A. (1997). "Analytical Study of Hinge Formation in Steel Moment-resisting Frames." *STESSA '97 Behavior of Steel Structures in Seismic Areas*, Kyoto, Japan, August.

McMullin, K. M. and Astaneh-Asl, A (1997). "Comparision of Plastic Hinge Behavior in Experimental and Analytical Studies." 5th *International Colloquium on Stability and Ductility of Steel Structures*, Nagoya, Japan, July.

McMullin, K. M., and Astaneh-Asl, A. (1994). "Cyclic Behavior of welded steel shear studs, Proceedings, Structures Congress, ASCE, Atlanta.

McMullin, K. M., and Astaneh-Asl, A. (1994). "Innovative approach to controlling the seismic response of steel structures." Proceedings, 5th U.S. National Conf. Of Earthquake Engineering., EERI, Chicago.

External Funded Proposals

McMullin, K.M. (2012). "Design Procedures for Precast Concrete Cladding Subsystems Incorporating Innovative Detailing for Regions of High Seismicity." Proposal funded as a subcontract to UC – San Diego. Source funding total of \$250,000 grant from the Charles Pankow Foundation to lead institution. San Jose subcontract for \$48,000.

McMullin, K. M and Merrick, D. (2010). "Composite Column Testing Project – 2010." Loral Space Systems. Total contract for \$2500.

McMullin, K. M., Stojadinovic, B., Du, W., Le, T., and Rai, K. (2006). "NEESR-SG: Experimental Determination of Performance of Drift-Sensitive Nonstructural Systems under Seismic Loading." Proposal funded by the National Science Foundation, Washington, D.C. Total contract of \$1,360,000.

McMullin, K. M., Nelson, C., Hustler, J., Thomas, N. and Pino, C. (2003). "Partnership for Student Success in Science." Proposal funded by the National Science Foundation, Washington D.C. Total contract of \$7,934,705.

McMullin, K.M. (2002). "Business Recovery and Reconstruction after the 2001 Nisqually Earthquake." Proposal funded by the Earthquake Engineering Research Institute, Oakland, CA. Total contract of \$5,000.

McMullin, K.M. (2002). "Aluminum Truss Chord Tensile Strength." Proposal funded by the California Engineering Contractors, Inc., Oakland, CA. Total contract of \$6,400.

McMullin, K.M. and Merrick, D. (1999). "Seismic Performance of Gypsum and Stucco Walls - Testing." Proposal funded by the CUREe-Caltech Woodframe Project, Pasadena, CA. Total contract of \$68,000

McMullin, K.M. (1999). "Expansion of the California Academy of Sciences Earthquake Engineering Exhibits." Proposal funded by the PEER Center.,Richmond, CA. Total contract of \$8,353.

McMullin, K.M. (1999). "Introduction of Earthquake Engineering to Under-represented Populations of Undergraduate Engineering Programs." Proposal funded by the PEER Center.,Richmond, CA. Total contract of \$1,550.

McMullin, K.M. (1999). "Documentation of Undergraduate Scholars Course for the Pacific Earthquake Engineering Research Center." Proposal funded by the PEER Center.,Richmond, CA. Total contract of \$7,568.

McMullin, K.M. (1999). "Instructional Shake Tables: A Cooperative Effort in Engineering Education." Proposal funded by the National Science Foundation. Total contract of \$6,000.

Research Collaborators

Tara Hutchinson, Professor, University of California, San Diego
Keri Ryan, Assistant Professor, University of Nevada, Reno
Dan Merrick, Adjunct Instructor, San Jose State University
Thalia Anagnos, Professor, San Jose State University
Nikos Mourtos, Professor, San Jose State University
Claire Komives, Associate Professor, San Jose State University
Winncy Du, Professor, San Jose State University
Thuy Le, Professor, San Jose State University
Bozidar Stojadinovic, Professor, University of Zurich
Abolhassen Astaneh-Asl, Professor, University of California at Berkeley
Judy Liu, Assistant Professor, Purdue University
Sharon Woods, Professor, University of Texas at Austin
Julio Ramirez, Professor, Purdue University
Norman Owens, Professor, San Francisco State University

Awards and Honors

College of Engineering Researcher of the Year	2008
National Science Foundation Research Grant - \$1.3M	2006
College of Engineering Teacher of the Year	2006
National Science Foundation Research Grant - \$8.4M	2003
College of Engineering Award: Research on College Teaching and Learning Institute for Teaching and Learning	2000
CUREe-Caltech Research Grant - \$87K	1999
Graduate Student Instructor Award, U.C. Berkeley	1995
Summer Institute in Japan Fellow, National Science Foundation	1993
California Registered Professional Engineer	1991
Best of Program Student Paper, Lincoln Arc Welding Foundation	1988
Chi Epsilon, civil engineering honorary fraternity, Univ. of Oklahoma	1986
Alpha Epsilon, agricultural engineering honorary fraternity, Iowa State Univ.	1982
State of Iowa Scholarship, Prairie City Comm. High School	1978
Leadership Scholarship, Jaycee-ettes, Prairie City	1978
National Honor Society, Prairie City Comm. High School	1977
Danforth Award, 4-H, Jasper County, Iowa	1976

Student Research Advisees

Christina Cheng, Graduate Student	2013
Mohammad Mohammadahi, Graduate Student, CE298	2012-2013
Mia Nguyen, Graduate Student, CE298	2012-2013
Liz Johnson, Undergraduate Student NSF Research Experience for Undergraduates – Summer 2012	2011-2012
Ann Ma, Undergraduate Student SJSU Undergraduate Research Recipient – AY2013/14 NSF Research Experience for Undergraduates – Summer 2012	2011-2013
Eugenia Tai, Undergraduate Student SJSU Undergraduate Research Recipient – AY2013/14 NSF Research Experience for Undergraduates – Summer 2012	2011-2013
Caleb Stewart, Undergraduate Student	2011
Gottam Reddy, Graduate Student	2011
Siddaiah Yarra, Graduate Student Currently a University of Nevada, Reno doctoral student.	2011-2013
Diana Lin, Undergraduate Student NSF Research Experience for Undergraduates – Summer 2011	2010-2011

Pooja Nagar, Graduate Student, CE298	2009-2012
Lokesh Patel, Graduate Student, CE298	2009-2012
Amarjeet Saini, Graduate Student	2009-2010
Currently a University of Nevada, Reno doctoral student	
Taide Rodrigues, Undergraduate Student, CE105	2009-2010
Hansel Corsa, Undergraduate Student, CE105	2009-2010
Robert Pacheco, Graduate Student – 298	2009-2010
Ngoc Pham, Graduate Student – Thesis Advisor	2009-2010
Bryce Lloyd, Undergraduate Student	2008-2010
Currently a University of California, Davis graduate student	
Sal Ramirez, Undergraduate Student	2008-2010
Cecilia Luu, Undergraduate Student	2008-2011
NSF Research Experience for Undergraduates – Summer 2011	
Maggie Ortiz, Graduate Student – Thesis Advisor	2007-2011
Completed M.Engr. degree at University of California, Berkeley	
Kaisum Chiang, Graduate Student – Thesis Advisor	2007-2010
Matt Knutsen, Graduate Student – Thesis Advisor	2007-2010
Juan Renteria, Undergraduate Student	2007-2009
COE Outstanding Undergraduate Student – 2009	
Completed M.S. degree at Stanford University	
Rene Gonzalez, Graduate Student - CE298	2007-2009
Melissa Leung, Graduate Student	2007-2008
Hoang Nguyen, Graduate Student - CE298	2007
Shiloh Trajan, Undergraduate Student	2007
Leisser Mazariegos, Undergraduate Student	2007
Phoung Le, Graduate Student – CE298	2006
Leo Yang, Graduate Student – CE298	2005-2007
Daniel Wills, Graduate Student - CE298	2005-2006
Ishun Chan, Graduate Student – CE298	2005-2006
Sven , Graduate Student - CE298	2005-2006
Mark Okomoto, Graduate Student	2005
Lin Khine, Graduate Student	2004-2006
Seema Shenvi, Graduate Student	2003-2004
Savitha Rao, Graduate Student - CE298	2004-2007
Maria Baldizan, Post-doctorate researcher	2002-2003
Abel Covarrubias, Undergraduate Student	2003
Sandy Soe, Graduate Student – CE298	2003-2004
Rhine Davis, Graduate Student – CE298	2002-2003
Carter Choi, Graduate Student – CE299	2001-2002
Yukwen Wong, Graduate Student – CE298	2002-2004
Adam White – Graduate Student – CE299	2002-2003
Amy Kwong, Undergraduate Student	
Completed M.S. degree at Stanford University	
PEER Undergraduate Scholarship Recipient	
Kevin Chan, Graduate Student – CE299	2001-2002
Sajitha Karim, Graduate Student – CE298	2002-2003
Winnie Lo, Graduate Student - CE298	2001-2002
Parvin Zahertar, Visiting Scholar	2000-2003
Michael Zahn, Graduate Student	1999-2000
Hugo Villabona, Graduate Student	1999-2001
Loan Anh T. Nguyen, Undergraduate Student	1999-2001
College of Engineering Scholar of Exceptional Engineering Students	
Sheila Parrott, Undergraduate Student	1999-2001
PEER Undergraduate Scholarship Recipient	
Hanh Nguyen, Undergraduate Student	1999-2000
Phillip Ewing, Undergraduate Student	1999

PEER Undergraduate Scholarship Recipient	
Nitin Christopher, Graduate Student	1998
Anna Portillo, Undergraduate Student	1998
PEER Undergraduate Scholarship Recipient	
Hilda Vazquez, Undergraduate Student	1997-2000
College of Engineering Scholar of Exceptional Engineering Students	
PEER Undergraduate Scholarship Recipient	
Jason Brygelsen, Graduate Student	1997
Hrund Einnarsdottir, Graduate Student	1997
College of Engineering Graduate Student of the Year, 1997	
Katie Shriver, Undergraduate Student	1996-1997
College of Engineering Scholar of Exceptional Engineering Students	
Bo Chen, Graduate Student	1996-1997
Stacy Gaddini, Graduate Student	1996
Completed M.S. degree at Stanford University	

Service to the University and Community

Department Committees/Service

RTP Committee	2013-2014
RTP Committee	2011-2012
Assessment Committee	2008-2009
RTP Committee	2008-2009
Geotechnical Engineering Search Committee	2007-2008
Geotechnical Engineering Search Committee	2006-2007
Water Resources Engineering Search Committee	2006-2007
Department Chair Review Committee	2006-2007
Assessment Coordinator	2002-2009
Laboratory Technician Search Committee	2001
Executive Committee	2000-2002
Chi Epsilon Advisor	2000-2001
Curriculum Committee	1999-2000
Chair of FMI Review Committee	1999
Ad Hoc Lab Plan Committee	1998-1999
Workload Committee	1998-1999
Curriculum Committee	1997-1998
Chair of the Department Chair Review Committee	1996-1997
Laboratory Technician Search Committee	1997

College of Engineering Committees/Service

Strategic Planning Committee	2013
RTP Committee	2012-2013
EXCEED Faculty Mentor	2012
Master Advising Task Force	2011
RTP Committee	2009-2010
Assessment Task Force	2004-2010
Graduate Studies	2008-2009
Assessment Task Force	2001-2002
Interim Associate Dean of Undergraduate Studies Search Committee	2001
Information Technology Committee	1999-2000
Review of Engineering Processes and Tools Committee	1998-1999

University Committees/Service

Education Program Review	2005-2007
International Studies and Students	1999-2000
Campus Planning Board	1997-2007

Professional Services Activities

Member of American Society of Engineering Educators	1997-2000
Member of Pacific Earthquake Engineering Center's Education Committee	1996-2007
Member of American Society of Civil Engineering	1992-2009
Member of Structural Engineers Association of Northern California	1988-2009
Seminar Instructor, Continuing Education Seminar, "Damage to Gypsum Partition Walls of Woodframe Construction,"	2004
Wood Structures Subcommittee of Seismology Committee,	2001-2007
Representative to State Steel Subcommittee,	1998-1999
Nominated for Board of Directors,	1998
Seminar Instructor, Continuing Education Seminar, "Design of Moment-Resisting Steel Frames after the Northridge Earthquake,"	1996
Steel Subcommittee of Seismology Committee,	1996-2002
Research Committee,	1992-1993
Public Affairs and Membership Committee,	1990-1992
Member of Earthquake Engineering Research Institute	1988-2009
Annual Meeting Organizing Committee,	2003
President of U.C. Berkeley Student Chapter,	1994-1996

Community Services Activities

Shinnyo-En Temple	1996-2013
Toastmasters International	1983-1985

Synergistic Activities.

Primary Synergy of Work. I am working on reducing seismic hazards through better understanding of earthquake engineering. I am doing this by synergy of my efforts of research, teaching and service.

Research – experimental testing of earthquake resistant architectural finish elements.

Seismic Performance of Precast Concrete Cladding Systems – research conducted since 1998 on experimental testing and modeling of steel connections used to support cladding panels.

Seismic Performance of Gypsum and Stucco Wall Materials – funded by the CUREe-Caltech Woodframe Project for 1999-2001. www.engr.sjsu.edu/mcmullin/research/twall/wall.htm

Upgrade of the Earthquakes Exhibit of the California Academy of Sciences – funded by the Pacific Earthquake Engineering Research Center for 1999-2000.

Documentation of the Undergraduate Earthquake Scholars Course – funded by the Pacific Earthquake Engineering Research Center for 1999-2000.

"Final Report for 1993 Summer Institute in Japan." Presented to Kajima Corporation and the National Science Foundation, August 1993. McMullin, K. M.

Teaching – courses taught in earthquake engineering at SJSU.

CE165 – Introduction to Earthquake Resistant Design – undergraduate elective to prepare students for licensing exam and industry design procedures.

CE265 – Advanced Earthquake Resistant Design – advanced subjects in earthquake engineering including performance based design, nonlinear modeling and detailing of concrete structures – taught online to provide access for geographically-remote non-matriculated students.

CE267 – Advanced Steel Design – modified the course content to contain 50% of the semester to be the design and detailing of steel frames for seismic resistance.

CE269 – Ductile Detailing of Steel Moment Connections – this course had the students design, build and test specimens representing typical seismic resistant details.

Independent Research – I have overseen a total of two high school, eight undergraduate, fourteen masters-level graduate students, and one visiting scholar researcher working in the area of earthquake engineering.

Service – professional societies

Education Committee – Pacific Earthquake Engineering Research Center

Structural Engineering Association of Northern California – Seismology Subcommittees

Earthquake Engineering Research Institute – Member

Example of Synergy of Work. Textbook on Earthquake Engineering.

I have compiled my writing on earthquake engineering into a textbook format, including specific chapters and assignments. Drafts of portions of this book are used as Readers for several of the courses I teach. Large sections are used for the undergraduate and graduate earthquake design courses (CE165 and CE265) while smaller portions are used for the earthquake related portions of concrete design, steel design, timber design, advanced steel design, connection detailing and independent study courses (CE162, CE163, CE164, CE267, CE269, CE298). After several drafts of had been completed, negotiations with a publisher about publication began in 2010.