

Thomas J. Siller
Curriculum Vitae

Current Positions

Associate Professor
Department of Civil and Environmental Engineering
Colorado State University
Fort Collins, Colorado 80523
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Professional Experience

1994-present: Associate Professor, Civil and Environmental Engineering, Colorado State University
2003-2015: Associate Dean for Academic and Student Affairs: College of Engineering
2011-July 2012: Founding Director, CSU STEM Center
7/07-6/08: American Council for Education Fellow
6/01-6/02: Visiting Professor, National Technological University, Sabbatical
8/97-8/98: Acting Associate Dean for Undergraduate Studies, College of Engineering
1988--1994: Assistant Professor, Civil Engineering, Colorado State University
1983--1988: Graduate Research Assistant, Carnegie Mellon University
1981--1983: Assistant Project Engineer, D'Appolonia Consulting Engineers,
Pittsburgh, PA
1979--1981: Graduate Research Assistant, University of Massachusetts at Amherst

Education

Ph.D.: Civil Engineering, 1988, Carnegie Mellon University,
Thesis Title: Seismic Response of Tied-back Retaining Walls, Advisor: P. Christiano
MS: Civil Engineering, 1981, University of Massachusetts at Amherst,
Thesis Title: Static and Dynamic Properties of Railroad Ballast and Subballast for Track
Performance Prediction, Advisor: E. Selig
BS: Civil Engineering, 1979, State University of New York at Buffalo

Awards and Honors

- Leo Jensen Award: Best Education Paper, Engineering Education for Sustainable Development Conference, 2016
- Distinguished Service Award, Office of International Programs, Colorado State University, 2010
- American Council on Education, ACE Fellow 2007-2008, CSU mentor: Provost Tony Frank, University of Oregon mentors: President D. Fronhmeyer, Provost L. Brady.
- Affiliated Scholar, Center for the Advancement of the Scholarship on Engineering Education, National Academy of Engineering, 2004-Present
- Who's Who in America's Teachers, 1996, 1998, 2000 (4th, 5th, and 6th editions)
- Nominee: CSU Best Teacher Award, CSU Alumni Association, 1996, 1997
- US WEST Direct Education Excellence Award, 1996 (Advising of Student Athletes)
- Jack Cermac Award: Outstanding Advisor in Engineering, 1996

- Outstanding Advisor in College of Engineering, Student Engineering Legislature, 1995
- Chi Epsilon Gold Key Award: Outstanding Civil Engineering Professor, 1994
- Engineering Dean's Council Award of Excellence, Engineering Science Program, 1993
- Dean's Recognition Award, Rocky Mountain Section, ASEE, Spring 1992
- Outstanding Advisor in College of Engineering, Student Engineering Legislature, 1992

Funding History

- Engineering and Education Partnership: Preparing the Next Generation of Cross Disciplinary Trained STEM Teachers, NSF, \$592,634, September 2015-August 2018, supplement of \$61,670 added in 2016.
- CSU Noyce Phase II: Empowering Scholars and STEM Teachers, NSF, \$799,487, Co-Pi, 1/1/16-12/31/20
- IUSE/PFE:RED: SINC: From Stovepiping to Integration and Collaboration: Fundamentally Change Engineering Departments and Education, NSF, \$1,988,663, Senior Personnel, 9/1/15-8/31/20
- Engineering Information Foundation, NY, Assessment of the Professional Learning Institute, \$25,000, 2010-2011, PI.
- NSF: Noyce Teacher Scholarship, Co-Pi, \$1,200,000, 1/11-1/16.
- Bohemian Foundation, Pharos Fund: Summer Engineering Camps for High School Students, \$5,000, PI, May-June 2010, PI.
- Bohemian Foundation, Pharos Fund: Summer Engineering Camps for High School Students, \$15,000, PI, May-June 2009, PI.
- Paxton/Patterson LLC: High School Introduction to Engineering Curriculum Content Validation Project, \$27,709, Co-PI, Oct. 2007-March 2008, Co-PI.
- NCIIA: Developing an Academic Partnership for Sustainable Practices in Community Development, PI, \$7500, PI, June 2007-May 2009, PI.
- NSF: Rocky Mountain Middle School Math/Science Partnership, \$454,881, Sept. 2004-Aug. 2009, became PI during Fall 2006.
- NSF: Information Technology in the integrated civil engineering curriculum, Co-PI, 2002-2003, \$98,144.00
- Mountain-Plains Transportation Consortium, Implementation of Portable Computer Tool for Inspection of Small Bridges, PI, 1993-1996, \$68,959.00
- DOI-Bureau of Reclamation: Expert System Development for Dam Safety, PI, 1992-1994, \$60,000.00
- DOI-Bureau of Reclamation: Development of Dam Safety Database Management System, PI, 1990-1991, \$20,000.00
- NSF: Seismic Behavior of Tiedback Retaining Walls, PI, 1988-1990, \$59,935.00

Courses Taught

ENGR 101: Introduction to Engineering Grand Challenges
 CIVE 102: Introduction Civil and Environmental Engineering
 CIVE 103: Engineering Graphics and Computing

CE108: Civil Engineering Principles I
CE109: Civil Engineering Principles II
EG 192, Engineering Science Freshman Seminar
CE 208: Civil Engineering Analysis I
CE 209: Civil Engineering Analysis II
ES320: Software Tools for Engineers
CE350: Soil Mechanics for Non-Engineers
CE360: Solid Mechanics
ENGR 392: Engineering Grand Challenges, China Study Abroad program
CIVE 405: Sustainable Civil and Environmental Engineering
CE450: Soil Mechanics
CE550: Foundation Engineering
CIVE 550: revised to combine previous 550 & 553 content
CE553: Earth and Earth Retaining Structures
CE575: Engineering Applications of Expert Systems
CE655: Advanced Soil Mechanics
CE681/754: Geotechnical Engineering for Infrastructure
EG680: Decision Support Systems and Expert Systems (Guest Lecturer)

Short Courses/ Lectures

Tailings Engineering and Management, 1990, CSU, Topic: Slope Stability
Lecture: Expert Systems in Geotechnical Engineering, Industry Days, CSU, 1990

Publications

Refereed Journals

1. Siller, T. J., R. Atadero, A. M. A. Casper, and C. Paguyo,, Leveraging Sustainability to Teach About Social Justice in Civil Engineering Curricula, International Journal of Engineering Education, Special Issue "Ethics, Social Responsibility and Sustainability in Engineering Education", in print.
2. Souissi, M, Cherry, J. A., and Siller, T., Helical Pile Capacity-to-torque Correlation: A More Reliable Capacity-to-torque Factor Based on Full Scale Load Tests, DFI Journal: The Journal of the Deep Foundations Institute, V14, No. 2, pp. 19-29, 2020. <https://doi.org/10.37308/DFIJnl.20190716.208>
3. Maciewjewski, A. A., Chen, T. W., Byrne, A. S., De Miranda, M. A., Sample McMeeking, L. B, Notaros, B. M., Pezeshki, A., Roy, S., Leland, A. M., Reese, M. D. Rosales, A. H., Siller, T. J., Toftness, R. F. and Notaros, O., A Holistic Approach to Transforming Undergraduate Electrical Engineering Education, IEEE Access, V5 pp. 8148-8161, 2017
4. Novak, Heather, Paguyo, Christina, and Siller, Thomas, Examining the Impact of the Engineering Successful/Unsuccessful Grading (SUG) Program on Student Retention:

- A Propensity Score Analysis, *Journal of College Student Retention: Research, Theory & Practice*, 18(1), 83-108, 2016
5. Siller, T. J. and John Durkin, University-Industry Partnership to Develop Engineering Students' Professional Skills, *International Journal of Engineering Education*, pp. 1166-1171, V29, N5, 2013.
 6. Fantz, Todd, Siller, Thomas, De Miranda, Michael, Pre-Collegiate Factors Influencing the Self-Efficacy of Engineering Students, *Journal of Engineering Education*, ASEE, V100, N3, pp. 604-623, July 2011.
 7. Fantz, Todd, DeMiranda, Michael, and Siller, Thomas J., Knowing What Engineering and Technology Teachers Need to Know: An analysis of pre-service teachers engineering design problems, *International Journal of Technology and Design Education*, V21, N 3, pp. 307-320, 2011.
 8. Siller, T. J., and G. R. Johnson, Specialization: A Detriment to Problem Conception, *Bulletin of Science, Technology & Society*, V30, N3, pp. 214-221, 2010.
 9. Bender, K., Johnson, J., and Siller, T., Use and Impact of Quality Enhancement Systems: Integrating Assessment With Other University Planning and Evaluation Efforts, AIR Professional File Paper #118, pp. 1-20, 2010.
 10. T. J. Siller and G. R. Johnson, Management structure designed to facilitate changing engineering curricula, *International Journal of Engineering Education*, V25, N6, pp.1218-1225, 2009.
 11. Bender, K. and Siller, T. "Raising the Utility of Assessment: Developing Evidence Systematically to Satisfy the Institution, ABET and Regional Accreditation." *International Journal of Engineering Education*, V25, N5, pp. 928-940, 2009.
 12. T. J. Siller, Alma Rosales, John Haines, and Aaron Benally, Development of Undergraduate Students' Professional Skills, *Journal of Professional Issues in Engineering Education and Practice*, ASCE, V135, N3, pp 102-108, July 2009.
 13. T. J. Siller, Michael De Miranda, and David Whaley, Engineering and Education Partnership, *International Journal of Engineering Education*, V23, N1, pp. 58-64, 2007.
 14. Kim Bender and Thomas Siller, How an Engineering College Uses a University's Quality Enhancement System to Generate and Manage Evidence for Multiple Accreditation and Accountability Bodies, *Quality in Higher Education*, V12, No. 2, pp. 175-191, July 2006.
 15. Neil S. Grigg, M. E. Criswell, Darrell Fontane, and T. J. Siller, Information Technology in Civil Engineering Curriculum, Grigg, Criswell, Fontane, and Siller, *Journal of Professional Issues in Engineering Education and Practice*, ASCE , V131, N1, pp 26-31, January, 2005.
 16. Neil S. Grigg, M. E. Criswell, Darrell Fontane, Laura Saito, T. J. Siller, and D. Sunda Integrated Civil Engineering Curriculum: Five Year Review. *Journal of Professional Issues in Engineering Education and Practice*, ASCE, V130, N3, pp 160-165, July 2004.
 17. Charlie, Wayne A., Raymond J. Battalora, Thomas J. Siller, and Donald O. Doehring, Magnitude Recurrence Relations for Colorado Earthquakes, *Earthquake Spectra*, V18, N2, pp 233-250, 2002
 18. Gemperline, Mark, and T. J. Siller, Fractal Interpolation, *Journal of Computers in Civil Engineering*, *Journal of Computing in Civil Engineering*, ASCE, V16, N3, pp.

184-193, July 2002.

19. Siller, T. J., Sustainability and Critical Thinking in Civil Engineering Curriculum, *Journal of Professional Issues in Engineering Education and Practice*, V127, N3, pp104-108, 2001
20. Siller, T. J., Mike Palmquist, Donald E. Zimmerman, Technology as a Vehicle for Integrating Communication and Teamworking Skills in Engineering Curricula, *Journal of Computers in Engineering Education*, V6, N4, pp245-254, 1998.
21. Huang, Yi-Tsung, and T. J. Siller, Fuzzy representation and reasoning in geotechnical site characterization, *Computers and Geotechnics*, V21, N1, pp. 65-86, 1997.
22. Neil S. Grigg, M. E. Criswell, T. J. Siller, Integrated Civil Engineering Curriculum, ASCE, *Journal of Professional Issues in Engineering Education and Practice*, V122, N4, pp. 151-155, October 1996.
23. W. A. Charlie, C. E. Scott, T. J. Siller, L.W. Butler, and D.O. Doehring. Estimating Liquefaction Potential of Sand Using the Piezovane, *Geotechnique*, V45, N1, pp55-67, 1995.
24. M.A. Chouicha and T.J. Siller. Liquefy - a rule-based expert system for liquefaction evaluation: Implementation. *Computers and Geotechnics*, V16, N1, pp. 1-36, 1994.
25. M.A. Chouicha and T.J. Siller and Wayne Charlie. Liquefy - a rule-based expert system for liquefaction evaluation: Verification. *Computers and Geotechnics*, V16, N1, pp. 37-70, 1994.
26. T.J. Siller and M.Dolly. Design of tiedback retaining walls for seismic loading. *Journal of Geotechnical Engineering*, N11, pp1804-1821, Nov. 1992.
27. S.R. Abt, J.R. Richardson, S.A. Hogan, B.L. Van Zanten, and T.J. Siller. Laboratory tests of scour monitoring devices. *Transportation Research Record*, No. 1350, pp19-27, 1992.
28. T.J. Siller and D.D. Frawley. Seismic response of multi-anchored retaining walls. *Journal of Geotechnical Engineering*, N11, pp1787-1803, Nov. 1992.
29. T.J. Siller, P. Christiano, and J. Bielak. Seismic response of tiedback retaining walls. *Earthquake Engineering and Structural Dynamics*, 20(7), pp605--620, 1991.

Books

1. Just Engineering: The Quest for Cultural, Economical, Environmental and Technical Sustainability, Siller, Thomas, Johnson, Gearold, pp. 81, Morgan & Claypool, June 2018.
2. Civil Engineering in the Twenty-First Century, Grigg, Criswell, Fontaine, and Siller, pp. 264, ASCE, 2001.

Book Chapters

1. Siller, Thomas and Gearold Johnson (2022). Engineers should be activists. In Fritzsche, A, and Santa Maria, A. (Eds.), *Rethinking Technology and Engineering: Dialogues across disciplines and geographies*, Spring: Philosophy of Engineering and Technology Series (In Press)
2. Siller, T., Johnson, G., & Korte, R. (2021). Broadening Engineering Identity: Moving beyond Problem Solving. In Z. Pirtle, D. Tomblin, & G. Madhavan (Eds.), *Engineering and Philosophy: Reimagining Technology and Social Progress* (pp. 181-195). Switzerland: Springer Nature.

3. Siller, Thomas J., Johnson, Gearold R., and Troxell, Wade O., What do Sustaining Life and Sustainable Engineering have in Common?, *Engineering Education for Sustainable Development, New Developments in Engineering Education for Sustainable Development*, pp. 273-282, 2016.
4. Preparing Technology Teachers to Infuse Engineering into Technology Education: Pre-Service, ongoing professional development, and outreach models, Chapter 7, *Engineering and Technology Education*, McGraw Hill, M. De Miranda, W. Troxell, T. Siller, and Eric Iverson, pp. 133-158, 2008.
5. M.L. Maher, editor. *Expert Systems in Civil Engineering: Technology and Application, Chapter Expert Systems in Geotechnical Engineering*. ASCE, 1987.
6. M.L. Maher, editor. *Expert Systems in Civil Engineering: Technology and Applications, Chapter Expert Systems in Environmental Engineering*. ASCE, 1987.

Series Editor: Synthesis Lectures on Sustainable Development

1. Hoek, E.M.V., et al., Oil & Gas Produced Water Management. *Synthesis Lectures in Sustainable Development*, ed. T.J. Siller. 2021: Morgan & Claypool. P. 91.
2. Hoek, E.M.V., et al., Sustainable Desalination and Water Reuse. *Synthesis Lectures in Sustainable Development*, ed. T.J. Siller. 2021: Morgan & Claypool. P. 204.

Book Editor

1. Content and Structure with Technology, Proceedings, 9th Annual Conference, Technology-Based Engineering Education Consortium, William C. Norris Institute, Bloomington, MN.

Other

1. Casper, A. K., Atadero, R. A., Siller, T. J. *Teaching the Socially-Situated Nature of Climate Change Science in Technical STEM Courses: A Hurricane Katrina Case Study*. AGU Fall Meeting 2019
2. Norris, A. S., Siller, T. J., Cook, A. P., Atadero, R. A. (2019). *An Evaluation of a First-Year Civil Engineering Student Group Dynamics Intervention*. First Year Engineering Experience, ASEE
3. Cave, K. A., Byrne, Z. S., Siller, T. J., Maciejewski, A. A. (2019). *What Engineering Students Think About How They Learn ABET* (pp. 10). Washington: 2019 ASEE Annual Conference and Exposition.
4. Tom Siller, T.J., et al., Using student video presentations to develop communication skills, in ASEE 2018 Annual Conference and Exposition. 2018, ASEE: Salt Lake City, Utah. p. 14.
5. Ghorbani, M., A.A. Maciejewski, and T.J. Siller, Incorporating Ethics Education into an Electrical and Computer Engineering Undergraduate Program, in ASEE 2018 Annual Conference and Exposition. 2018, ASEE: Salt Lake City, Utah. p. 8.
6. Sourajeet Roy, Branislav M. Notaros, Ali Pezeshki, Tom Chen, Thomas J. Siller, Anthony A. Maciejewski, Laura B. Sample McMeeking, Colorado State University, Active Learning Model as a Way to Prepare Students for Knowledge Integration, ASEE 2018 Annual Conference and Exposition. 2018, ASEE: Salt Lake City, Utah.

7. Anthony A. Maciejewski, Tom Chen, Zinta S. Byrne, Melissa D. Reese, Branislav M. Notaros, Ali Pezeshki, Sourajeet Roy, Andrea M. Leland, Laura B. Sample-McMeeking, Thomas J. Siller, Throwing Away the Course-centric Teaching Model to Enable Change, ASEE 2018 Annual Conference and Exposition. 2018, ASEE: Salt Lake City, Utah.
8. Cook, A. P., Hemmati, M., Siller, T. J., The EWB Challenge –Preparing Engineers to Work Globally Through International Development Design Projects, ASEE: First Year Engineering Experience, August 2017, Daytona Beach, FL.
9. Hemmati, M., Cook, A. P., Siller, T. J. Project-Based Service Learning for First-Year Engineering Students in Partnership with the Graduate Teaching Fellows. ASEE: First Year Engineering Experience, August 2017, Daytona Beach, FL.
10. Aazhang, B., et. al. (45 authors from multiple universities, Siller was one of 3 from CSU), Vertical Integrated Project (VIP) Programs: Multidisciplinary Projects with Homes in Any Discipline, ASEE Annual Conference and Exposition, June 2017, Columbus, OH.
11. Cook, Alistair, Siller, Thomas, and Johnson, Gearold, Creating International Experiences for First Year Engineers through the EWB Challenge, ASEE National Conference and Exposition, New Orleans, June 2016, New Orleans, LA.
12. Alma H. Rosales, Andrea M. Leland, Olivera Notaros, Richard F. Toftness, IEEE High Plains Section, Thomas J. Siller, Michael A. De Miranda, Alistair Cook, Melissa D. Reese, Zinta S. Byrne, James Warren Weston, Anthony A. Maciejewski, Preliminary Work on Weaving Professionalism Throughout the Engineering Curriculum, ASEE National Conference and Exposition, New Orleans, June 2016, New Orleans, LA.
13. Siller, Thomas J., Johnson, Gearold R., and Troxell, Wade O., What do Sustaining Life and Sustainable Engineering have in Common?, Engineering Education for Sustainable Development, June 2015, Vancouver, BC, Canada.
14. Froyd, J., Chevellle, R. A., and Siller, Thomas, October 2014, Potential Minimum Viable Value Propositions for Engineering Education Scholarship, Frontiers in Education, Madrid, Spain, 2015.
15. Stanton, K., Siller, T., October, 2012, A First Look at Student Motivation Resulting from A Pass/Fail Program for First-Semester Engineering Students, Frontiers in Education, Seattle, WA.
16. Siller, T., Johnson, G., August, 2012, Multiple Perspectives: Key to a new Introductory Engineering Course, Freshman Year Engineering Experience Conference, Pittsburgh, PA.
17. Siller, T., August, 2012, Use of pass/fail grading to increase first year retention, Freshman Year Engineering Experience Conference, Pittsburgh, PA.
18. Stanton, Ken, and Siller, Tom, A Pass/Fail Option for First-Semester Engineering Students: A Critical Evaluation, Frontiers in Education, ASEE/IEEE, Session T2D, 6 pgs., October 2011.
19. Siller, T. J. and G. R. Johnson, Engineering on the Boundaries, World Engineering Convention, p. 6, September, 2011, Geneva, Switzerland.
20. Charlie, Wayne A., Raymond J. Battalora, Thomas J. Siller, Donald O. Doehring, and van de Lindt, John, Colorado Earthquakes and Active Faults, GEO-Volution: The Evolution of Colorado's Geological and Geotechnical Practice, ASCE, PP. 18-32,

- 2006.
21. Siller, T. J., Gearold Johnson, and Amy Pruden, Offering an International Degree Program as a Dual Degree with Liberal Arts, ASEE National Conference, Chicago, IL, June, 2006, Paper number: 1054
 22. Johnson, Gearold, Dueb Lakhder, T. J. Siller, Designing a B.S. Degree Program in Engineering for Globally Sustainable Development, ASEE National Conference, Chicago, IL, June, 2006, Paper number: 1072
 23. Thomas J. Siller, Amy Pruden and Gearold R. Johnson, A Baccalaureate in International Engineering, 7th WFEO World Congress on Engineering Education
 24. Siller, T. J., and G. R. Johnson, Constituent Influences on Engineering Curricula, ASEE National Conference, Salt Lake City, Utah, June, 2004, Paper number: 1680.
 25. Neil S. Grigg, Marvin E. Criswell, Darrell G. Fontane, and Thomas J. Siller, IT as information Technology in CE and Instructional Technology in Education, ASEE National Conference, Salt Lake City, Utah, June, 2004, Paper number: 1828
 26. Thomas J. Siller, Marvin E. Criswell, Darrell G. Fontane, and Neil S. Grigg, Some Methods to Achieve Changes in Delivered, ASEE National Conference, Salt Lake City, Utah, June, 2004, Paper number: 1813
 27. Civil Engineering Body of Knowledge for the 21st Century, Contributed to Committee Report, Published by ASCE in 204
 28. Russel C. Jones, Bethany S. Oberst, T. J. Siller, It's Time to Re-think Engineering Education Conferences, SEFI (The European Society for Engineering Education), Annual Meeting, September 2002.
 29. Siller, T. J., and G. R. Johnson, E-Technologies for Improving Engineering Education at a Distance, e-Technologies in Engineering Education: Learning Outcomes Providing Future Possibilities, UEF, Davos, Switzerland, August 2002.
 30. Russel C. Jones, Bethany S. Oberst, Gearold Johnson, T. J. Siller, International Exposure For Engineering Students Using Distance Learning Techniques, e-Technologies in Engineering Education: Learning Outcomes Providing Future Possibilities, UEF, Davos, Switzerland, August 2002.
 31. Russel C. Jones, Bethany S. Oberst, T. J. Siller, It's Time to Re-think Engineering Education Conferences, ASEE Annual Conference, Session 3160, June 2002
 32. Siller, T. J., R. C. Jones, and G. R. Johnson, Continuing Education for Engineering Educators in Developing Countries via Electronic Communications, 8th World Congress on Continuing Education for Engineering Education, January 2001
 33. Mark C. Gemperline and Siller, Thomas J. International Conference on Advances in Underground Pipeline Engineering - Proceedings of the 2nd International Conference on Advances in Underground Pipeline Engineering Jun 25-28, 1995 Bellevue, WA, ASCE New York, NY, p 194-204
 34. W.A. Charlie, D.O. Doehring, J.P. Brislawn, H. Hassen, and T.J. Siller, Loma Prieta Earthquake: Piezovane, SPT and CPT Evaluations of Liquefaction in Monterey County, California, International Conference on Soil Mechanics and Foundation Engineering, Special Volume 4
 35. S.D. Oaks, T.J. Siller, Y.A. Hussin, S. Hart-Drabble, and P.S. Nowak. A multi-parameter vulnerability analysis of earthquake damage and post-event reconstruction: An evaluation of the marina district. In Proceedings of the Fourth International Conference on Seismic Zonation, Volume III, pages 189--194. EERI, 1991.

36. T.J. Siller, S.J. Fenves, D. Reed, and J. Bielak. A prototype knowledge-based system for seismic damage assessment. Final Project Report Project Number 86-4022, National Center for Earthquake Engineering Research, 1988.
37. T.J. Siller. Seismic Response of Tied-Back Retaining Walls. Ph.D. thesis, Carnegie Mellon University, Pittsburgh, PA, 1988.
38. T.J. Siller, P.P. Christiano, and J. Bielak. Dynamic behavior of tied-back retaining walls. Proc. Third International Conference on Soil Dynamics and Earthquake Engineering, 1987.
39. S.S. Kim, M.L. Maher, R.E. Levitt, M.F. Rooney, T.J. Siller, and S.G. Riche. Survey of the state-of-the-art expert/ knowledge based systems in civil engineering. Technical report, US Army Corps of Engineers, USA-CERL Special Report P-87/01, 1986.
40. T.J. Siller, J.A. Coronato, J. Bielak, and P.P. Christiano. The nonlinear seismic response of retaining walls. Proc. Third US National Conference on Earthquake Engineering, Volume 1, pages 1--10. EERI, 1986.
41. J.L. Withiam, T.J. Siller, R.M. Bort, A.J. Eggenberger, P. Christiano, and U. Dayal. Correlation of penetration test results with in-situ and laboratory test data. Proceedings, Second European Symposium on Penetration Testing, Volume 1, pages 183--187. A.A. Balkema, 1982.
42. T.J. Siller. Properties of railroad ballast and subballast for track performance prediction, Report Number FRA80-261p. Technical report, University of Massachusetts, Amherst, 1980.

Presentations

Invited

1. Opening talk at Engineering Education for Sustainable Development conference, Rowan University, June 2018
2. Professional Skills: Moving Beyond the Classroom to Engage the Profession, ABET Symposium, Pittsburgh, PA, 3 April, 2014.
3. Best Assessment Processes VIII, Rose-Hulman, 28th February 2006, *Developing Evidence Systematically to Satisfy the multiple Criteria of ABET, Regional Accreditation, and Institutional Program Review*, Bender and Siller
4. 2005 Dane and Mary Louise Miller Symposium and CASEE Annual Meeting, National Academy of Engineering Center for the Advancement of Scholarship on Engineering Education, 18th October 2005, *Constituent Groups for Engineering Education: Is Engineering a profession or a commodity based on technical expertise?*, Siller and Johnson
5. Siller, T. J., Gearold Johnson, and Amy Pruden, Offering an International Degree Program as a Dual Degree with Liberal Arts, ASEE National Conference, Chicago, IL, June, 2006, Paper number: 1054
6. Johnson, Gearold, Dueb Lakhder, T. J. Siller, Designing a B.S. Degree Program in Engineering for Globally Sustainable Development, ASEE National Conference, Chicago, IL, June, 2006, Paper number: 1072
7. Thomas J. Siller, Amy Pruden and Gearold R. Johnson, A Baccalaureate in International Engineering, 7th WFEO World Congress on Engineering Education, Budapest, Hungary, March, 2006

8. T.J. Siller, P.P. Christiano, and J. Bielak. Dynamic behavior of tied-back retaining walls. Proc. Third International Conference on Soil Dynamics and Earthquake Engineering, 1987.

Other

1. Siller, T., DeMiranda, M., Poster presentation: Engineering pathways for P-12 teacher preparation, NSF Grantee Session, ASEE 2018 Annual Conference and Exposition. 2018, ASEE: Salt Lake City, Utah.
2. Siller, T., G. Johnson, and R. Korte, Engineering as problem solving: A need for a different approach. 2018, forum for Philosophy in Engineering and Technology, June 2018.
3. Administering Faculty-Led Engineering Abroad Programs in Less Common Destinations, Scot Allen and Tom Siller, 16th International Engineering Colloquium, Lexington, KY, 8 November, 2013
4. Partnerships 2.0: from understanding towards assessment Sharing and Mutual advocacy Beau Johnson and Tom Siller, ACHUO-i Living learning Programs Conference, Orlando, FL, Session 405, 16 October, 2011
5. Growing a living-learning program Beau Johnson, Tom Siller, and Kristal Sawatzke, Colorado State University, ACHUO-i Living learning Programs Conference, Orlando, FL, Session 602, 17 October, 2011
6. Engineering on the Boundaries, World Engineering Convention, 8 September, 2011, Geneva, Switzerland, T. Siller.
7. How to Be a Good Partner: Creating and Maintaining Successful Campus Partnerships, ACUHO-I, Living-Learning Programs Conference, 24 October 2010, Charlotte, NC, Beau Johnson and T. Siller.
8. Third-Space Engineering: Designing for Residential Learning Communities, ACUHO-I, Living-Learning Programs Conference, 25 October 2010, Charlotte, NC, Beau Johnson and T. Siller.
9. NCA Higher Learning Commission, Annual Meeting, 23 April 2007, Chicago, PRISM Jessica Jonson, Kim Bender, and T. Siller.
10. 2007 Forum of the Association for Institutional Research, June 2007, Kansas City, KS *Use and Impact of a Quality Enhancement System: A Tale of Two Universities*, Bender, Johnson, Siller, and Walter.
11. Best Assessment Processes VII, Rose-Hulman, April 8th, 2005, *Raising the Utility of Assessment: Developing Evidence Systematically to Satisfy both ABET and Regional Accreditation Criteria*, Bender and Siller

Professional Activities

- Reviewer for International Journal of Sustainability in Higher Education, 2017, 2018
- Executive board member: VIP program at Colorado State University, 2015
- Reviewer for ASEE meeting: Collaborative Network for Engineering and Computing Diversity, 2017
- ASEE International Division Newsletter Editor, 2010-2011
- Reviewer ASEE National Conference, 2009-2012, 2014, 2015, 2017, 2018

- Reviewer for the Journal of Professional Issues in Engineering Education and Practice, ASCE, 2014, 2015, 2017,2018
- Reviewer for the International Journal of Engineering Education, 2013, 2014, 2017
- NSF Panel Reviewer, 2012, 2013, 2014, 2016, 2017
- Review Frontiers in Education, IEEE-ASEE, 2010-201, 2014
- BOK Curriculum Committee, ASCE, Vice-Chair, 2005-2006
- Body of Knowledge Committee, ASCE 2002-2004
- Reviewer for the Journal of Geotechnical Engineering, ASCE; editorial board 1997-1998
- College Representative, Technology-Based Engineering Education Consortium: Executive Board Member 1996-1997, National Program Chair for 1997 Conference
- Editorial Board, academic.writing (online journal)

Professional Associations

- American Society for Engineering Education
- American Society of Civil Engineers
- Sigma Xi, Member
- International Network for Engineering Studies
- American Association for the Advancement of Science
- American Educational Research Association
- International Technology and Engineering Education Association

Workshops and Short Courses

- National Science Foundation Sponsored workshop on Research in Engineering Practice, Invited participant, November 2018.
- National Science Foundation IDEAS Lab workshop on increasing minority and disabled student participation in engineering. Invited participant, March 2014, Leesburgh, VA.
- NSF: Concept Inventory Workshop, 2012, 2013, Alexandria, VA.
- National Summer Institute for Learning Communities, Evergreen State College, 2010
- Higher Learning Commission: Assessment Workshop, 2002
- Best Practices in Assessment in Engineering Education, Rose Hulman University, 1997, 2005, 2006
- SMU design center: Integrating Design into the Curriculum, March 1995
- American Society for Engineering Education: Effective Teaching Institute, 1991

Thesis Supervision

Completed Dissertations: Ph.D.

1. Moncef Souissi, 2019, Advisor, Title: Helical Pile Capacity To Torque Ratio: A Functional Perspective.
2. Alistair Cook, 2019, Co-Advisor, School of Education, Title: Investigating Engineering Students' Learning for Global Preparedness In Curricular And Cocurricular Engineering Education.

3. Todd Franz, 2009, Co-Advisor, School of Education, Title: Pre-Collegiate Factors Influencing the Self-efficacy of First-year College Engineering Students.
4. Lacy Karpilo, 2008, Co-Advisor, School of Education, Title: Engineering Students' and Faculty Perceptions of Teaching Methods and the Level of Faculty Involvement That Promotes Academic Success.
5. R. Craig Woodring, Sept. 1994, Title: A data-centered paradigm for enhancing water resource decision support systems.
6. Mark Gemperline, May 1994, Title: Vehicle Induced Loads on Fractal Road Surfaces.
7. M. Amine Chouicha, March 1991, Title: A knowledge-based system to evaluate liquefaction potential.
8. Fathey ElSaid, June 1991, Title: Effect of Deformation Modes on Limit State Earth Pressures.

Current MS students: 2 Student Affairs in Higher Education candidates; outside member.

Completed Thesis: MS

1. Gess, Kerry, 2006, Title: GIS Mapping of Liquefaction Risk Using Fuzzy Logic.
2. Dan Lingenauber, 2003, Title: Comparison of Design Methods for Geosynthetic Reinforced Walls Using Slope Stability Analysis.
3. T.M. Liao, 1998, Title: Lime-Fly Ash Stabilization Of Fruitland Sand Roadbase In New Mexico.
4. Y-T. Huang, 1996, Title: A Fuzzy Reasoning System for Geotechnical Site Characterization.
5. H. Trantham-Hevelone, 1995, Title: A Knowledge Based System For The Inspection of Sub-Twenty Foot Bridges.
6. B. Boyce, Spring 1994, Title: The Sufficiency of Sinusoidal Motions in Seismic Ground Motion Studies.
7. S. Pacquette, September 1990, Title: Geotechnical Site Characterization in Fluvial Environments.
8. V. Santos, August 1990, Title: Dam Safety Evaluation Using Knowledge-based Techniques.
9. M. Dolly, June 1990, Title: Seismic Design of Tiedback Retaining Walls.
10. D. D. Leslie, June 1990, Title: Seismic Response of Multi-Anchored Retaining Walls.
11. L. A. Schure, Summer 1990, Title: Porewater Pressure Increases Resulting From Blast-Induced Spherical Stress Waves. (Co-advisor)
12. C. E. Scott, Summer 1989, Title: Estimating Liquefaction Potential of Sands Using the Piezovane. (Co-advisor)