

CURRICULUM VITAE
DAVID C. GOSSELIN
(REVISED SEPTEMBER 2017)

Environmental Studies Program
University of Nebraska-Lincoln
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EDUCATION

1987 South Dakota School of Mines and Technology Rapid City, SD -- **Ph.D.**, Geology
1982 College of St. Thomas, St. Paul, MN -- **B.A.**, Geology, Magna Cum Laude

EMPLOYMENT HISTORY

Academic Leadership

2017 –Present **Co-Chair**, Chancellor’s Sustainability Commission, University of Nebraska-Lincoln
2008 - Present **Director**, Environmental Studies, University of Nebraska-Lincoln.
2004 - 2007 **Associate Director**, School of Natural Resources, University of Nebraska-Lincoln
2009- Present **Chair**, Science for Educators Specialization, Masters of Applied Science, University of Nebraska-Lincoln
1993 - Present **Director**, Nebraska Earth Systems Education Network, Institute of Agriculture and Natural Resources, University of Nebraska-Lincoln.

Faculty Position

2003 - Present **Professor of Earth Science**, School of Natural Resources, University of Nebraska-Lincoln.
1995 - 2003 **Associate Professor**, School of Natural Resource Sciences and Conservation and Survey Division, University of Nebraska-Lincoln.
1989 – 1995 **Assistant Professor**, Conservation and Survey Division, University of Nebraska-Lincoln.
1988 - 3/1989 **Postdoctoral Trainee**, Analytical Chemistry Group; Battelle-Pacific Northwest Laboratory and Northwest College and University Association for Science, Richland, WA.

Courtesy Appointment: Dept. of Teaching, Learning, and Teacher Education, College of Education and Human Sciences, University of Nebraska-Lincoln,

HONORS and AWARDS

2017 Best Presentation Award in Session, 2017 International Science Education Conference, Clute Institute
2016 Spirit of Service Award, Center for Civic Engagement, University of Nebraska-Lincoln
2015 Idaho Author Award Winner – Best in Business Book Category
2015 Idaho Author Award Winner – Top Ten Nonfiction Book Category
2014 Omtvedt Innovation Award Winner, Science Education, Institute of Agriculture and Natural Resources, UNL
2013 Floyd S. Oldt Boss of the Year Nominee, University of Nebraska Office Professionals Association
2013 Nebraska High School Coach of the Year Small Parochial School, National Soccer Coaches Association of America
2010 2009 Regional Coach of the Year, National Soccer Coaches Association of America
2007 Lifetime Achievement Award, Nebraska State Soccer Association
2005 Volunteer of the Year, Youth Sports Branch, YMCA, Lincoln, NE
1999 Catalyst Award, Nebraska Association of Teachers of Science
1995 Institute of Agriculture and Natural Resources Team Award: Mid-Nebraska Water Quality Demonstration Project.
1991 Nominated for John C. Frye Award, Association of American State Geologists for best paper in environmental geology published by a state survey. Paper: Bazile Triangle Groundwater Quality Study.

PROFESSIONAL SOCIETY AFFILIATIONS

National Ground Water Association
American Geophysical Union
Professional Geologist - State of Nebraska
Council of Environmental Deans and Directors

Geochemical Society
Sigma Xi, Scientific Research Society
Association of Environmental Studies and Sciences
National Association of Geoscience Teachers

ACADEMIC ADMINISTRATION and LEADERSHIP EXPERIENCE

Leadership – Academic and Student Support Services – Undergraduate Curriculum and Program Support - Director of Environmental Studies:

Provide vision and leadership to the Environmental Studies Program to develop students who have the skills to be competitive in the marketplace; Only education program at UNL where sustainability is a core value in its mission statement; Facilitated the creation and host of the inter-college undergraduate sustainability minor – Society and the Environment; Develop strategic and action plans; Recruit, retain, and advise undergraduate majors - student population is 120 majors and minors up from 90 in 2008; Develop liaison with UN Foundation; Collaborate with an interdisciplinary groups of undergraduate majors in the College of Arts and Sciences and College of Agriculture and Natural Resources including the 12 academic majors that participate in the program; Innovative collaboration with University of Nebraska Medical Center on a 4+1 program in Environment and Public Health and 3+3 program with UNL College of Law; Serve as chairperson of the Environmental Studies Coordinating Committee; Coordinate, expand and facilitate academic programs; Supervise the Environmental Studies Program Coordinator Academic Advisor; Manage financial and day-to-day operation of the program; Ensure program remains current and attractive to grow enrollment using formative and summative program assessment; Collaborate with Talent Training International; Coordinate Environmental Engagement in the Community – a service learning course; teach three other undergraduate courses including senior thesis research class; develop and implement course and program assessment plans. I believe that if you invest time and resources in planning then there needs to be implementation and assessment of the plan. Our Environmental Studies program is committed and designed to the develop 21st century skills in our students to increase their effectiveness once they have entered the workforce.

Leadership – Sustainability and Interdisciplinary Programs - Local and National Scales: Elected to the Executive Committee of the Council of Environmental Deans and Directors (CEDD), which is part of the National Council for Science and the Environment (NCSE). Served as the chair of the curriculum committee. In this role, I coordinated the implementation of the strategic plan to Enhance Interdisciplinary Environmental Education Curricula. An outcome of this work is the international, multi-institutional “Employing Model-Based Reasoning in Socio-Environmental Synthesis” (EMBeRS) working group, funded by the National Center for Socio-Environmental Synthesis. Our group was recently funded for an NSF NRT Grant. Train graduate students and faculty to improve transdisciplinary sustainability education and the ability of people to work on collaborative teams. At the national level, I am on the management team for the \$10M NSF STEP grant for STEM Educational Partnerships awarded to the Science Education Resource Center at Carleton College. One of the goals of this project is to integrate sustainability principles and geosciences into STEM curriculum. Another component of my work has been to focus attention on the needs of the 21st Century workforce.

Leadership – Undergraduate Academic and Student Support Services – Associate Director School of Natural Resources: I served as Associate Director of the School of Natural Resources at UNL from 2004 to 2007. In this role, I provided leadership for approximately 200 people, including 75 faculty who had interdisciplinary expertise in climate change, drought, biodiversity, conservation biology, human dimensions, soil and water resources, and ecology. I also worked with directors of four major interdisciplinary research centers. Working with faculty and staff, we accomplished the following, among others: increased undergraduate and graduate student enrollment by hiring a recruitment specialist; implemented a SNR-specific recruiting and retention program; implemented an assessment program that was recognized as a model for other departments; responded to the needs identified by employers and alumni by initiating the Writing Across the Curriculum in Natural Resources program; implemented a new budgeting and teaching assistantship allocation process; and used marketing surveys to increase the profile for the SNR Map and Publication office.

Leadership - Nebraska Earth Systems Education Network (NESEN) – Director: Developed professional development and educational service programs in Earth system science for in-service teachers and undergraduate students in early childhood and elementary, middle School, and secondary programs. This program involved significant collaboration with K-12 teachers and the College of Education and Human Sciences. I have managed budgets as a principal and/or co-principal investigator on grants and contracts totaling nearly \$2.5M from NSF, NASA, DOE, Nebraska Department of Education, and Toyota Foundation; Director of the innovative, online, distance delivered Science of Educators Specialization in the Masters of Applied Science Program, which currently includes about 30 students. The purpose of this program is to increase content knowledge of K-12 educators.

Student Support Services - Diversity: I am committed to increasing diversity in the environmental professions as indicated by a seven-year, on-going project with NCSE's Environmentors Program and the Upward Bound Program to provide research experiences for underrepresented, first-generation, low income high school students. These types of programs need to be expanded. Our model could be used to increase the diversity of student populations and broaden the impacts of federally funded research projects at all institutions of higher education.

Leadership - Faculty Strategic Planning and Unit Merger: Developed unit strategic and action plans for UNL Conservation and Survey Division related to water resources assessment and Earth system science education; Provided leadership on two committees responsible for merging diverse academic and professional groups into one administrative unit, the School of Natural Resources; Lead collaborative efforts with unit faculty and staff to create UNL School of Natural Resources bylaws; Strategic plan development for UNL Environmental Studies program.

Applied. Community- and Stakeholder Oriented Research; Project Manager and Principal Investigator for Nebraska Public Water Supply Research Program. Investigations included microbiology, chemistry, engineering, geology, hydrogeology, engineering, adaptive management, public policy, decision-making, and economics; Developed collaborative relationships with the Nebraska Department of Health and Human Services (NDHHS), EPA Region VII, 30 rural Nebraska communities, the Nebraska Public Policy Center, and UNL faculty and staff to investigate alternative mitigation strategies for addressing current and future maximum contaminant level issues related to arsenic and uranium; Managed cooperative agreement between the University of Nebraska-Lincoln and Nebraska Department of Health and Human Services (NDHHS) to analyze data from over 1500 domestic wells in Nebraska to assess Domestic Well Water Quality in Rural Nebraska; Project Manager for collaborative project with the board of directors and staff of the Twin Platte Natural Resources District to developed a scientifically defendable groundwater monitoring program. *See Research and Education Grant Information for more information below.*

LEADERSHIP DEVELOPMENT ACTIVITIES

TTI Success Insights, Inc.

Certified Professional Behavioral Analyst – DISC; November 2015 – Present

Certified Professional Motivators Analyst, December 2015 - Present

Chain Reaction Partners

Coaching Skills for Leaders Workshop – November 2004

UNL Center for Leadership Development Seminars

- Building Trust and Enhancing Organizational Efficiency
- Take Risks, Not Chances
- Skills for Leading Through Difficult Times, Working with Difficult People
- Leadership Style - Building and Using Influence Effectively

NU Leadership Development Series at UNL (Development Dimensions International (DDI))

- Coaching for Improvement, March 2004
- Managing Performance Problems, April 2004

UNL Interdisciplinary Faculty Retreat – 2007

- Recruiting and Retaining Diverse Students

North Central Region – Instructional Leadership Workshop - 2007

- Student Learning...Strategies of Assessment, Outcomes, and Program Improvement

WORKSHOP LEADERSHIP AND FACILITATOR ACTIVITY (SINCE 2012)

- Systems, Society, Sustainability and the Geosciences, July 24 - 26, 2012, InTeGrate Workshop, Carleton College, Northfield, MN
- Developing Leaders of Interdisciplinary Environmental and Sustainability Academic Programs: Assessment and Evaluation of Interdisciplinary Environmental Programs, CEDD/AESS sponsored workshop, Association of Environmental Studies and Sciences, June 19, 2013, Pittsburg, PA
- Integrating Sustainability into Geoscience Courses. *Cosponsors:* GSA Geoscience Education Division; National Association of Geoscience Teachers, Geological Society of America Annual Meeting & Exposition, October 27-30, 2013, Denver, CO
- InTeGrate Module/Course Authors Meeting and Workshop, November 9-11, 2014, Carleton College, Northfield, MN
- Developing Leaders of Interdisciplinary Environmental and Sustainability Academic Programs: Building Program Support, and Facilitating Program Change, CEDD/AESS sponsored workshop, June 24 2015.
- Strengthening Sustainability Learning in your Program Workshop, July 16-17, 2015, Earth Educators Rendezvous, Boulder, CO.
- Building Stronger Department Workshop Facilitator, September 17-18, 2015, University of Washington-Bothell, National Association of Geoscience Teachers Traveling Workshops Program.
- Leading, Coaching, and Educating: Change your Mindset to Them, Workshop for Lincoln Human Resource Management Association, March 8, 2016. Lincoln, NE
- Employing Model Based Reasoning (EMBeRS) Summer Workshop for Faculty, June, 2016, Association of Environmental Studies and Sciences Meeting, American University, Washington, D.C.
- Employing Model Based Reasoning (EMBeRS) Summer Workshop for Ph.D. students, July 11-22, 2016, University of Texas at El Paso.
- Incorporating Thinking about the Earth across Disciplines Workshop, July 18 – 20, 2016, Earth Educators Rendezvous, Madison, WI.
- Building Stronger Department Workshop Facilitator, October 7-8, 2016, State University of New York - Fredonia, National Association of Geoscience Teachers Traveling Workshops Program
- Leading, Coaching, and Educating: Change your Mindset to Them, Leadership Development Workshop for Leadership LINK, April 26, 2017. Lincoln, NE
- Employing Model Based Reasoning (EMBeRS) Summer Workshop for Ph.D. students, June 7-14, 2017, University of Texas at El Paso.
- Developing Collaborative and Interdisciplinary Leadership Capacity to Address Wicked Problems: Part 1 and 2 Workshop, June 21, 2017, Association of Environmental Sciences and Study, University of Arizona, Tucson, AZ.
- Morningside Women's Soccer Program Team Enhancement Project Workshop Facilitator, August 13-14, 2017, Sioux City, IA.
- Johnson-Flodman-Guenzel-Widger Law Firm Team Enhancement Project Workshop Facilitator, August 17, 2017, Lincoln, Nebraska.
- Building Stronger Department Workshop Facilitator, November 3-4 2017, University of Northern Illinois, National Association of Geoscience Teachers Traveling Workshops Program.

GRANTS and CONTRACTS

Interdisciplinary Environmental and Earth Systems Education Research (\$2,526,662)

- Collaborative Research: NRT-IGE: Employing Model-Based Reasoning in Environmental Science (EMBeRS) DGE - NSF Research Traineeship (NRT), (Principal Investigator with Deanna Pennington, UTEP, UNL UNL Share **\$53,331**, Two years.
- InTeGrate: Interdisciplinary Teaching of Geoscience for a Sustainable Future, Cathy Manduca, SERC - Carleton College P.I., Gosselin - Senior Personnel, EHR-GEO-STEP Center Project (DUE-1125331), Total - \$10M., UNL Share **\$141,546**. Five years
- Global Climate Change, International Food Security, and Local Sustainability: Collaborative Course Development and Sharing Among Institutions Serving Diverse and Underserved Learners, Rebecca Bolger, Brooklyn College, P.I., Gosselin – Senior Personnel, NASA-NICE Project, Total \$291,630, UNL Share **\$91,857**. 3 years

- UNL Science Scholars Program, T. Heng-Moss and J. Pederson, Co-P.I.s David Gosselin – Collaborator, National Science Foundation, **\$1,194,387** (not included in total) , 09/01/2010 - 08/31/2015.
- Development of an Educator-Climatologist Learning Community (ECLC) using Web 2.0 and On-line, Process-Oriented Climate Change Research and Educational Experiences, D.C. Gosselin (PI), co-P.I.s R. Oglesby, R. Low, R. Bonnsetter, NASA, **\$349,973**, 01/01/2011 – 12/31/2013.
- Masters Degree in Applied Science Education, D.C. Gosselin, (P.I.) co-P.I. R.J. Bonnsetter , and B. Strand, Toyota Foundation, **\$540,335**, 4 Years, Start date: 7/1/07 – 6/30/13
- UNO-NASA Space Grant Enhanced Resources, C. Larson-Miller and D.C. Gosselin (Co-PI), NASA, **\$9,800**, 09/01/2010 - 03/31/2010.
- Connecting Youth to Science, D. C. Gosselin (P.I.) National Council for Science and the Environment, **\$5,086**, 08/01/2010 - 12/31/2012.
- ENVR 201 Online, D.C. Gosselin and C. Haney, Co-P.I.s, Extended Education and Outreach, **\$5,000**, 07/01/2010 - 06/30/2011.
- UNO-Space Grant Earth Science Literacy, C. Larson-Miller and D.C. Gosselin (Co-PI), NASA, **\$3,000**, 10/01/2009 - 05/31/2010.
- Global Climate Change Literacy for Educators: Using On-line Professional Development to Integrate Content and Pedagogy, D.C. Gosselin, P.I., Ronald Bonnsetter, (Co-PI) Donna Woudenberg (Co-PI), **\$175,902**, 07/01/2009 - 06/30/2011.
- The UNL EnvironMentors and Upward Bound Partnership Program: Creating Environmental Research Opportunities for Underresourced High School Students (OEATP EnvironMentors Program), Joan Mendoza-Gorham and D.C. Gosselin (Co-P.I.s), **\$24,555**, 07/01/2009 - 12/31/2010.
- UNO-Space Grant Literacy, C. Larson-Miller and D.C. Gosselin (Co-PI), NASA, **\$7,500**, 02/02/2009 - 03/31/2010.
- UNO-Space Grant Literacy, C. Larson-Miller and D.C. Gosselin (Co-PI), NASA, **\$7,500**, 02/01/2009 - 05/31/2010.
- UNO-Space Grant Literacy, C. Larson-Miller and D.C. Gosselin (Co-PI), NASA, **\$7,500**, 01/01/2009 - 12/31/2010.
- Faculty Leadership for Writing Initiative, Erin Blankenship (PI), David Gosselin – Co-PI, NU Kelly Fund, **\$22,000**, 09/01/2008 - 07/01/2010.
- Earth Science Institute of Elementary Educators (ESIEE), D.C. Gosselin, (P.I.) co-P.I. R.J. Bonnsetter , and T.F. Slater, NASA, **\$356,094**, 3 years, Start date: 8/14/05 to 8/13/08.
- Summer Earth Systems Education Institute (SESEI): A Partnership between Educational Service Unit #3 and the University of Nebraska-Lincoln., D.C. Gosselin, (P.I.), R.J. Bonnsetter, and S. Person-Pandil, Nebraska Department of Education Math and Science Partnership, **\$60,916**, 2/6/04 – 9/25/05.
- Sand Hills Biocomplexity: Integrating Biogeophysical Processes across Space and Time, D. Wedin, G. Henebry, and D. Loope (PIs), Gosselin - Senior Personnel, Responsibilities include Educational Outreach, National Science Foundation, **\$1,800,000** (not included in total); 10/1/03 to 9/30/07.
- Integration of Earth System Science Research and Education: Involving Teachers in Scientific Research and Scientists in Inquiry-Based Learning, D.C. Gosselin, (P.I.), co-PI, Ron Bonnsetter, UNL Teachers College, **\$74,204**, National Science Foundation, January 2000 to June 2002.
- Creating Connections between Regional Climate Change Information and the Public: A Multifaceted Approach. D.C. Gosselin, (P.I.), co-PI, Steve Meyer, UNL School of Natural Resource Sciences, **\$161,874**, National Institute of Global and Environmental Change, July 1999 to June 2003.
- Teacher Professional Development Program in Support of Earth Science in the Community (EarthComm), D.C. Gosselin, (P.I.), American Geological Institute, **\$57,851** June 1999 to June 2000.
- Professional Development Training for Earth Science and the Community (EarthComm) - A Pilot Project, D.C. Gosselin, (P.I.), American Geological Institute, **\$40,000**, June 1998 to May 1999.
- Process-oriented Environmental Change Education: A Model for Connecting Research to the Classroom, D.C. Gosselin, (P.I.), co-PI Steve Meyer, UNL School of Natural Resource Sciences, National Institute of Global and Environmental Change, **\$119,000**, July 1996 to 1999.
- Enhancing K-12 Drought-Related Educational Activities and Materials, D.C. Gosselin, (P.I.), National Drought Mitigation Center, **\$11,828**, July 1997 to June 1998.
- Nebraska Earth Science Education Network: Enhancing the NASA, University, and Pre-College Science Teacher Connection with Electronic Communication, NASA, D.C. Gosselin, (P.I.), co-PI, Dale Finkelson, UNL Information Services, **\$200,000**, March 1994 to February 1997.

Earth Systems and Geochemical Research (\$883,358)

- Evaluation of Geologic Rehabilitation of Public Water Supply Wells Having High Arsenic and Uranium II: A Collaborative project between Nebraska Department of Health and Human Services System and UNL. D.C. Gosselin, P.I. Nebraska Department of Health and Human Services System. **\$62,534**. 5/1/06 to 3/31/07.
- Evaluation of Geologic Rehabilitation of Public Water Supply Wells Having High Arsenic and Uranium I: A Collaborative project between Nebraska Department of Health and Human Services System and UNL. D.C. Gosselin, P.I. Nebraska Department of Health and Human Services System. **\$31,500**. 10/1/04 to 9/30/05.
- The Nebraska Arsenic Information and Technical Support System for Public Water Supplies in Nebraska. D.C. Gosselin, P.I. Environmental Protection Agency. **\$56,100**. 10/1/04 to 9/30/06.
- Sand Hills Biocomplexity: Integrating Biogeophysical Processes across Space and Time, D. Wedin, G. Henebry, and D. Loope (PIs), Gosselin - Senior Personnel, Responsibilities include hydrogeology and Educational Outreach, National Science Foundation, **\$1,800,000** (not included in total); 10/1/03 to 9/30/07.
- A Strategy for Small Water Supply Systems in Nebraska: Focus on Arsenic. D.C. Gosselin (P.I.), F.E. Harvey, and R.M. Joeckel, co-PIs, U.S. Environmental Protection Agency. **\$25,000**. 10/1/03 to 9/30/04.
- Assessing the occurrence of Arsenic in groundwater: Implications for Small Water Supply Systems in Nebraska, D.C. Gosselin (P.I.), F.E. Harvey, and R.M. Joeckel, co-PIs; U.S.G.S. 104b Grants Program, **\$15,000**. 4/1/03 to 3/29/04.
- Arsenic Strategy for Small Water Supply Systems in Nebraska. D.C. Gosselin (P.I.), F.E. Harvey, and R.M. Joeckel, co-PIs, U.S. Environmental Protection Agency. **\$50,000**. 10/1/02 to 9/30/04.
- Upper Big Blue Natural Resources District Confined Aquifer Delineation Project. Cooperative Agreement. S. Summerside, D. C. Gosselin, and M. Jess, **\$10,990**. 2003. 1 year.
- Evapotranspiration: Linking Ground Water Hydrology with Local Climate in the Nebraska Sand Hills. Tim Arkebauer, David Billesbach, D.C. Gosselin, E. Harvey, and D. Wedin. co-PIs. UNL-Agricultural Research Division Interdisciplinary Grant. 2000. **\$20,000**. 1 year.
- Using Trace Elements for Labeling Corn Tissues and Insect Pests for Mark-Recapture Experiments. Blair Siegfried, D.C. Gosselin, L.Meinke, T. Hunt, and E. Harvey, co-PIs. UNL-Agricultural Research Division Interdisciplinary Grant. 2000. **\$39,920**. 2 years.
- Hydrogeology of Saline Wetlands in Eastern Nebraska. Ed Harvey, J.F. Ayers, and D.C. Gosselin, co-PIs. U.S. Environmental Protection Agency. 1997. **\$73, 764**. 2 years.
- Twin Platte Natural Resources District Water Quality Study. D.C. Gosselin and J. Goeke, co-PIs. Twin Platte Natural Resources District. 1995. **\$16,500**. 1 year.
- The Hydrologic Dynamics of Wet Meadows in the Nebraska Sand Hills. D.C. Gosselin, PI. U.S. Environmental Protection Agency. 1993. **\$62,950**. 3 years.
- Domestic Well Quality Rural Nebraska. D.C. Gosselin, PI. Nebraska Department of Health. 1993. **\$20,000**. 1 year.
- Monitoring Lakes and Wetlands. D.C. Gosselin and D.C. Rundquist, co-PIs. U.S. Department of Energy National Institute for Global Environmental Change. **\$250,000**. 1993. 3 years.
- Irrigation Wells as Sampling Mechanisms. D.C. Gosselin and J.F. Ayers, co-PIs. U.S. Dept. of Agriculture Cooperative States Research Service. **\$122,100**. 1992. 3 years.
- Bazile Triangle Groundwater Quality Project, P.I. for EPA/DEQ grant to Lower Elkhorn, Upper Elkhorn, Lower Niobrara, and Lewis and Clark Natural Resources District, 5/1989 – 2/10/90. **\$9,000**.

TEACHING ACTIVITIES

Courses Taught

ENVR 101: Introduction to Environmental Studies

ENVR 201: Science, Society, Environment, and Sustainability – Face-to-Face & Online

ENVR 319: Environmental Engagement in the Community

ENVR 495: Internship in Environmental Studies

ENVR 499a&b: Senior Thesis

UHON 395H: Water, Society and the Future

NRES 108: Earth's Natural Resource Systems - Face-to-Face & Online

NRES 299a: Earth Systems Science for Educators

NRES 809: Laboratory Earth: Earth and its Systems - Online

NRES 814: Laboratory Earth: Earth's Natural Resource Systems -Online

NRES 422/822: Laboratory Earth: Earth's Changing Systems - Online

NRES 896. Independent Study: Integrated Earth Systems Science Research.

TLTE 895, Independent Study Professional Development Credits for Educators.

Graduate Student Advising

Major or Co-Major Advisor: 5 Ph.D Students; 4 M.S. Students; 10 Masters of Applied Science (MAS) Students
Committee Member: 5 Ph.D Students; 2 M.S. Students

Undergraduate Senior Thesis Advising

As Senior thesis instructor – more than 150 senior thesis projects

PUBLICATIONS

Book

Gosselin, D., 2015. Focus on Them: A Mindset Revolution for Coaches, Educators, and Business Leaders. Aloha Publishing. Eagle, Idaho. ISBN: 978-1-61206-113-9.

Gosselin, D., Egger, A., and Taber, J. (Eds.) In Preparation, Interdisciplinary Teaching about Earth and the Environment for a Sustainable Future. Association of Environmental Sciences and Studies (AESS) Book Series, Springer – Nature, 275 p.

Editorial Responsibilities

Guest Editor. 1997. Journal of Paleolimnology, Special Issue Modern and Ancient Lake Environments of the Great Plains, 17(1), 154p.

Special Issue Co-Guest Editor. 2015. Journal of Environmental Studies and Sciences. Negotiating Boundaries: Effective Leadership of Interdisciplinary Environmental and Sustainability Programs.

Cuker, B., Crawford, M., Chambers, R., Gosselin (Editor - Team Lead), D. (2017). Renewable Energy and Environmental Sustainability Course., David Gosselin, Mary Savina, Monica Bruckner (Ed.), InTeGrate's Peer Reviewed Module and Course Collection.

https://serc.carleton.edu/integrate/teaching_materials/energy_sustain/index.html

Schulterbrandt Gragg III, R., Warford, J., Hewitt, C., Akinyemi, A., Young, C., McClendon, B., Gosselin (Editor and Team Lead), D. (2017). Food as the Foundation for Healthy Communities., David Gosselin, Joshua Caulkins, Monica Bruckner (Ed.), InTeGrate's Peer Reviewed Module and Course Collection.

https://serc.carleton.edu/integrate/teaching_materials/food_energy_water/index.html

Korfmacher, K., Richmond, M., Waggett, C., Gragg, R., Gosselin (Editor - Team Lead), D. (2017). Lead in the Environment Module., David Gosselin, Leilani Authurs, Monica Bruckner (Ed.), InTeGrate's Peer Reviewed Module and Course Collection. https://serc.carleton.edu/integrate/teaching_materials/lead/index.html

Conklin, M., Gill, S., McDowell, B., Washburne, J., White, T., Hoffman, A., Gosselin (Editor - Team Lead), D., Deere, A. (2017). Critical Zone Science Course., David Gosselin, Stuart Birnbaum, Monica Bruckner (Ed.), InTeGrate's Peer Reviewed Module and Course Collection.

https://serc.carleton.edu/integrate/teaching_materials/critical_zone/index.html

Davi, N., Plake, T., Sinton, C., Turner, R., Gosselin (Editor - Team Lead), D. (2017). Water, Agriculture, and Sustainability., David Gosselin, Joshua Caulkins, Monica Brucker (Ed.), InTeGrate's Peer Reviewed Module and Course Collection. https://serc.carleton.edu/integrate/teaching_materials/water_sustainability/index.html

Refereed Publications (n = 61)

Interdisciplinary Environmental and Earth Systems Education Research

Thompson, K., **Gosselin, D.C.** and 10 others, 2017. Designing the EMBeRS Summer School: Connecting Stakeholders in Learning, Teaching and Research. In Chen, W. et al. (Eds.) Proceedings of the 25th International Conference on Computers in Education. New Zealand: Asia-Pacific Society for Computers in Education, in press.

Gosselin, D.C. and R.J. Bonnsetter, 2017. Navigating and negotiating dispositional distances in an undergraduate environmental program using business-based assessments to enhance collaboration across disciplinary divides. Proceedings of the International Science Education, Clute Institute, Maui, HI. ISSN 2157 9660.

Gosselin, D.C., S. Vincent, C. Boone, A. Danielson, R. Parnell, and D. Pennington, 2016. Introduction to the special issue: Negotiating Boundaries: Effective Leadership of Interdisciplinary Environmental and Sustainability Programs, doi 10.1007/s13412-015-0312-2.

Pennington, D., G. Bammer, A. Danielson, **D. Gosselin**, J. Gouvea, G. Habron, D. Hawthorne, R. Parnell, K. Thompson, S. Vincent, C. Wei, 2016. National The EMBeRS Project: Employing Model-Based Reasoning in Socio-Environmental Synthesis, Journal of Environmental Studies and Science doi 10.1007/s13412-015-0335-8.

Gosselin, D., S. Cooper, S. Lawton R.J. Bonnstetter, and B. Bonnstetter, 2016, Lowering the walls and crossing boundaries: Applications of experiential learning and business-based assessments to teaching collaboration, *Journal of Environmental Studies and Science*, doi 10.1007/s13412-015-0312-2.

O’Connell, K., M.Bruckner, **D. Gosselin**, C. Manduca, 2016, Supporting Interdisciplinary Teaching about the Earth with the InTeGrate Website. *Journal of Environmental Studies and Science*, doi 10.1007/s13412-015-0317-x.

Gosselin, D. S. Burian, T. Lutz, and J. Maxson, 2015, Integrating Geoscience into Undergraduate Education about Environment, Society, and Sustainability using Place-Based Learning: Three Examples. , *Journal of Environmental Studies and Science*, 238, doi: 10.1007/s13412-015-0238-8

Gosselin, D.C., R.J. Bonnstetter, and B. Bonnstetter, 2014, Application of Business-Oriented Assessments to Improve Coach and Player Interactions: A Case Study, *Soccer Journal*, March-April, 59, 2, 44-48

Gosselin, D.C., C. Manduca, T. Bralower, and D. Mogk, 2013, Transforming the Teaching of Geoscience and Sustainability, *Eos*, 94, 25, 221–222.

Gosselin, D., S. Cooper, R.J. Bonnstetter, and B. Bonnstetter, 2013, Exploring the Assessment of 21st Century Professional Competencies of Undergraduate Students in Environmental Studies through a Business – Academic Partnership, *Journal of Environmental Studies and Science*, 3, 359–368, DOI 10.1007/s13412-013-0140-1.

Gosselin, D., R. Parnell, N. J. Smith-Sebasto, and S. Vincent. 2013. Integration of Sustainability in Higher Education: Three Case Studies of Curricular Implementation, *Journal of Environmental Studies and Science*, 3, 316–330, DOI 10.1007/s13412-013-0130-3.

Gosselin, D. C., J. Thomas, A. Redmond, C.Larson-Miller, S. Yendra, R. J. Bonnstetter, and T. F. Slater. 2010. Laboratory Earth: A Model of Online K-12 Teacher Coursework. *Journal of Geoscience Education*, 58, 4, 203-213.

Thomas, J., Redmond, A., **Gosselin, D.**, Bonnstetter, R., Yendra, S., Larson-Miller, C. 2009. Teaching Earth Science Online: Modifying Assessments to Improve Teacher’s Content Knowledge. Association for Science Teacher Education Annual Meeting, Hartford, CT. (Refereed)

Bonnstetter R.J. and **D.C. Gosselin**. 2004. Present Status on Earth Science Education in the USA. Proceedings of the Joint Conference (SITH2003) of The 38th Conference of Société Internationale des Techniques Hydrothermales and The 56th Annual Meeting of the Balneological Society of Japan, August, Okayama, Japan.

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Earth Systems and Geochemical Research

Stotler, R.L., Frappe, S.K., Harvey, F.E., **Gosselin, D.C.**, Shouakar-Stash, O., el Mugammar, H. 2011. $\delta^{37}\text{Cl}$ and $\delta^{81}\text{Br}$ fractionation during evaporation in the Alkaline Lakes Region, Sand Hills, Nebraska. Abstract EP41B-0621 presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.

R. Li, Merchant, J., Chen, X.H, Oglesby, R., and **Gosselin, D.**, 2009. Reducing Uncertainty in Characterization of the Vadose Zone for Modeling Groundwater Vulnerability. Eos Trans. AGU, 90(52), Fall Meet. Suppl., Abstract H31C-0795.

McVey, K. J., **Gosselin, D.C.**, Klawer, L.M. and Clement B. J., 2008. Biology, Microbial Mediation of Uranium and Arsenic Concentrations in Nebraska Public Water Supply Wells, Nebraska Academy of Sciences 108th Annual Meeting. April 2008.

McVey, K.J., **Gosselin, D.C.**, Clement, B. J., and Klawer, L. M. 2007. High Uranium and arsenic concentration affects microbial diversity in Nebraska Public Water Supply wells. Geological Society of America Abstracts with Programs, Vol. 39, No. 6, p. 67

McVey, K., and **Gosselin, D.C.** 2006. Uranium in Nebraska's Public Water Supply Wells. Midwest Groundwater Conference, Lincoln, NE. November 7 to 9, 2006.

Gosselin, D.C., Klawer, L.M, Harvey, F.E. and Warren, K.J., 2004. Arsenic in Nebraska's groundwater and public water supplies, Geological Society of America Annual Meeting, Denver, Colorado, November 6 to 10, Abstracts With Programs, Vol. 36, No. 5, p.356

Harvey, F.E., Stotler, R.L. and **Gosselin, D.C.** 2004. A Black Hills origin for groundwater in the Dakota aquifer of northeastern Nebraska, Geological Society of America Annual Meeting, Denver, Colorado, November 6 to 10, Abstracts With Programs, Vol. 36, No. 5, p. 451.

Niimi, B.T., T.M. Nowatski, T.M., Siegfried, B., Meinke, L., Hunt, T., **Gosselin, D.C.**, Harvey, E. and Warner, K.. 2002. In-field labeling of western corn rootworm adults with rubidium.) North Central Branch - Entomological Society of America, East Lansing, MI, March 24 to 26. Matson, S.D., Goeke, J.W., **Gosselin, D.C.**, and Harvey, F.E. 2002. Investigation of groundwater and surface water interactions in an irrigated area of western Nebraska using geochemical and stable isotope evidence. Proceedings of the Nebraska Academy of Sciences, April 26 - 27, 2002, p. 51.

Ayers, J.F., Harvey, F.E. and **Gosselin, D.C.** 2002. Groundwater Flow and Salt Transport in Saline Wetlands of Eastern Nebraska, Geological Society of America Annual Meeting, Denver, Colorado, October 27-30, Abstracts With Programs, Vol.34, No. 6, p 57.

Gosselin, D.C., Harvey, F.E., Billesbach, D., Arkebauer, T. and Wedin, D., 2002. What Do You Get When You Cross a Hydrogeologist, Geochemist, Physicist, Plant Physiologist, and a Grassland Ecologist?: An Interdisciplinary Project in the Nebraska Sand Hills, Geological Society of America Annual Meeting, Denver, Colorado, October 27-30, Abstracts With Programs, Vol.34, No. 6, p 57.

Billesbach, D, Arkebauer, T., **Gosselin, D.C.**, Harvey, F.E and Wedin, D. 2002. Evaporation in the Nebraska Sand Hills. American Geophysical Union Annual Meeting, San Francisco, AGU, 83(47), Fall Meet. Suppl., Abstract H52D-0899.

Putnam, S., Siegfried, B., Meinke, L., Hunt, T., **Gosselin, D.C.**, Harvey, E., and Warren, K.. 2001. In-field labeling of western corn rootworm using soil applied Rubidium. North Central Branch, Entomological Society of America, 56th Annual Meeting, Fort Collins, CO. March 25-28, p. 24.

Stotler, R.L., Harvey, F.E., and **Gosselin, D.C.**, 1999. Isotopic Evidence for Pleistocene Recharge in the Dakota Aquifer of Nebraska (abstract) Geological Society of America Annual Meeting, Denver, CO. Abstracts with Programs, Vol. 31, No. 7, A-349.

Adelman, D.D. and **Gosselin, D.C.**, 1999. Assessment of Water Quality in Rural Domestic Wells and Community Water Supplies. Nebraska Midwest Ground Water Conference, St. Paul, MN.

Gosselin, D.C., F.E. Harvey, D.B. Strickland, and R. Stotler. 1998. Major Ion, O-18, and D Variations in Groundwater from the Dakota Aquifer of Nebraska.. Geological Society of America Annual Meeting, Toronto, Canada, Abstracts with Programs, A-86.

Drda, S., **Gosselin, D.C.** and Harvey, F.E., 1997. Hydrologic and Geochemical Comparison of Two Interdunal Valleys, Nebraska Sand Hills. Nebraska Academy of Sciences, Annual Meeting, April. (abstract)

Gosselin, D.C., Khisty, M., Rundquist, D.C. and Harvey, F.E., 1997. Natural Responses of Shallow Lakes and Wetlands to Climatic/Environmental Change: Focus on the Nebraska Sand Hills. Accepted for The Great Plains symposium 1997: The Ogallala Aquifer, "Managing for Drought and Climate Change" 1997 Nebraska Water Conference.

Gosselin, D.C., Harvey, F.E., Drda, S. and Goeke, J., 1996. Comparison of the Hydrologic and Geochemical Dynamics of Two Interdunal Valleys, Central Sand Hills, Nebraska, Geological Society of America Annual Meeting Abstracts with Programs.

Chen, X., Ayers, J.F. and **Gosselin, D.C.**, 1996. Using Sensitivity Analysis for the Determination of Aquifer Parameters, including Vertical Hydraulic Conductivity. Geological Society of America Annual Meeting Abstracts with Programs.

Ayers, J.F., Chen, X., and **Gosselin D.C.**, 1996. Numerical Modeling of Contaminant Behavior Near a Pumping High-Capacity Well. Geological Society of America Annual Meeting Abstracts with Programs. Khisty, M.J., **D.C. Gosselin**, and Rundquist D.C., 1995. Characterizing A Groundwater-Lake System in the Nebraska Sandhills Using A Mass Balance Approach and Remotely Sensed Data, North Central-South Central Sections, Geological Society of America, Abstracts with Programs, 64.

Gosselin, D.C., and D.C. Rundquist. 1995. The Western Lakes Project: Multidisciplinary Investigations of Hydrologically Dynamic Fresh to Saline Lakes of Nebraska, North Central-South Central Sections, Geological Society of America, Abstracts with Programs, 52.

Ayers, J.F., **Gosselin, D.C.**, Guretzky, J.C. and Drda, S., 1995. An Analysis of High-Capacity Wells as Groundwater Sampling Mechanisms, Geological Society of America Annual Meeting Abstracts with Programs, A-101.

Gosselin, D.C., Ayers, J.F., Rundquist, D., Sibray, S., and Matherne, A.M., 1993. The Alkali Lakes Project: A Multidisciplinary Investigation of a Dynamic Hydrologic and Geochemical System. Annual Meeting of Front Range Section, American Geophysical Union, Golden, CO, 11.

Gosselin, D.C., Nabelek, P.I. and Peterman, Z., 1993. Major Ion, O-18, and Sr variations in K-rich Lakes of the Alkali Lakes Region, Western Nebraska. Geological Society of America Annual Meeting Abstracts with Programs, A320.

Matherne, A.M., **Gosselin, D.C.**, and Ayers, J.F., 1992. The Role of Groundwater in Maintaining Saline Lakes, Western Nebraska Sandhills. EOS Supplement, American Geophysical Union, 73, no. 14, 132.

Gosselin, D.C., 1992. An Overview of Archean Rocks in the Black Hills, South Dakota, Rocky Mountain Section, Geological Society of America, Abstracts with Programs, 15. (Oral Presentation)

Gosselin, D.C., Matherne, A.M., Ayers, J.F., and Sibray, S., 1991. Geochemical Characteristics of Alkaline Lakes in the Western Sand Hills, Nebraska, Geological Society America Abstracts with Programs, 23, A153. (Poster Presentation)

Gosselin, D.C. and Ayers, J.F., 1991. Hydraulic Influences on the Distribution of Agrichemicals within a Groundwater System, 36th Midwest Groundwater Conference Program with Abstracts, 21. (Oral Presentation)

Ayers, J.F., **Gosselin, D.C.**, and Zhang, Y.K., 1991. Water Samples from Irrigation Wells - How Representative Are They?, 36th Midwest Groundwater Conference Program with Abstracts, 48.

Ayers, J.F., Zhang, Y.K. and **Gosselin, D.C.**, 1991. Water-Sampling Regime Around High-Capacity Wells--An Analysis, Geological Society America Abstracts with Programs, 23, A326.

Laul, J.C., **Gosselin, D.C.** and Smith, M.R., 1989. The Bholghati Consortium: Chemical Study of the Bholghati Howardite. Lunar Planet Science XX, 558-559.

Smith, M.R., Koppelaar, D.W., **Gosselin, D.C.** and Laul, J.C., 1989. Direct Analysis of Geologic and Meteorite Samples Using Laser Ablation Inductively Coupled Mass Spectrometry Lunar Planet Science XX, 1026-1027.

Gosselin, D.C., and Laul, J.C., 1989. Chemistry of Allan Hills 85085: Characterization of a Unique Chondrite (abstract), Lunar Planet. Science XX, 349-350.

Gosselin, D.C., Laul, J.C., Smith, M.R. and Reid, A.M., 1989. The Bholghati Consortium: Preliminary Chemical and Petrologic Characterization of the Bholghati Howardite, Meteoritical Society Meeting, Fayetteville, AR, July, 207. **Gosselin, D.C.**, Papike, J.J., Zartman, R.E., Peterman, Z.E. and Laul, J.C., 1987. Archean Rocks of the Black Hills, South Dakota: Reworked Basement from the Dakota Segment of the Trans-Hudson Orogen (abstract), Geologic Association Canada - Mineralogical Association Canada Annual Meeting, May, Saskatoon, Saskatchewan,

48. Simon, S.B., Papike, J.J. and **Gosselin, D.C.**, 1986. Petrology of Luna 24 Grain Size Separates, Lunar and Planetary Science XVII, 801-802.

PROFESSIONAL IMPROVEMENT ACTIVITIES

Groundwater Concepts and Models. U.S. Geological Survey Training Course, National Training Center, Denver, CO, March 26-April 5, 1990.

Applications of Aqueous Geochemistry to Groundwater Investigations. Colorado Groundwater Association, Denver, CO, April 10-12, 1991.

Geochemical Modeling Workshop. U.S. Geological Survey Training Course, National Training Center, Denver, CO, February 10-14, 1992.

Estimating Groundwater Recharge. Geological Society of America, Denver, CO, October 25, 2002.

COMMITTEE and SPECIAL ASSIGNMENTS

National:

Member Board of Directors, Association of Environmental Studies and Sciences, 08/2015 – Present.
Member, Council of Environmental Deans and Directors Executive Committee, Member, 08/2008 – 08/2015.
Chair, Curriculum Committee - Council of Environmental Deans and Directors, 10/2010 – 08/2015.
Representative to the Coalition for Earth Science Education.
Member Peer-review Panel, Project Assessment for Geosciences Research, Office of Basic Energy Sciences, U.S. Department of Energy, July 11-16, 1993; Berkeley, CA.
Nebraska's representative on the NCR-174 committee, Synchrotron X-ray Sources in Soil Sciences (resigned 3/96)
Member, Executive Committee, Applying Community Technology Today, Groundwater Foundation

Regional:

Liaison Committee for the Central Nebraska Basins Study Unit, National Water Quality Assessment (NAWQA) program, U.S. Geological Survey. (Resigned 4/95)
Coordinated Earth Science Education activities at the joint meeting of the North Central and South Central sections of the Geological Society of America to held in Lincoln, NE, April 27-29, 1995.
Curriculum Advisory Committee, Department of Geology, South Dakota School of Mines and Technology

State:

Reviewer of Boyd County Low Level Radioactive Waste Disposal Facility Application. Reviewed sections on geochemical, hydrological characterization, and environmental monitoring.
Program Committee for the Mid-Nebraska Water Quality Demonstration Project.

Local:

Member, Lincoln Lancaster County Ecological Advisory Committee, May 2015 to present
Member, Mayor's Environmental Task Force, April 2015 to Present
Member, Lincoln Water System Stakeholder Committee, October 2013 to January 2015

University of Nebraska-Lincoln:

Member, Chancellor's Sustainability Commission, May 2015 to present
Member, Center for Science, Mathematics, and Computer Education - Science Advisory Board, 05/2010-05/2011
Member, University of Nebraska Online Learning Initiative, Instructional Design and Faculty Support, Community of Practice, 08/2009-12/2011
Member, Secondary Science Education Advisory Committee - Teacher's College
Member, UNL Outreach Council (1/96-5/96)
Member, Nebraska Colloquium Advisory Council

Institute of Agriculture and Natural Resources:

Member, CASNR Distance and Online Education Advisory Team, College of Agricultural Sciences and Natural Resources, 10/14 to Present
Member, Masters of Applied Science Curriculum Committee, 08/2009-Present
Member, Bachelors of Science in Applied Science Curriculum Committee, 11/2007-Present
Member, Faculty Advisory Committee, College of Agricultural Sciences and Natural Resources 8/12 to 7/14
Member, Forensic Science Curriculum Committee (2005 - 2007)
Member, Faculty Advisory Committee, College of Agricultural Sciences and Natural Resources (9/99 to 6/00)
Member, School of Natural Resources (SNR) Faculty Implementation Committee (9/96 - 8/97)
Member, Advisory Committee, Office of Professional and Organization Development.
Member, 1999 IANR Faculty Conference Planning Committee
Member, International Center for Groundwater Research and Education Planning Committee (8/99)
Member, Conservation and Survey Division and SNR Integration Committee (4/02 –7/03)

School of Natural Resources Sciences:

Natural Resources Undergraduate Curriculum Committee, School of Natural Resources, 08/2008 – 08/2014)
Member, Curriculum Committee (8/97 – 7/99)
Chair and Co-Chair, Curriculum Committee (7/98 to 6/99)
Member, Advisory Committee to the Director (10/01 to 7/03)
Chair, Director's Interim Advisory Committee 9/03 – 7/04

Conservation and Survey Division:

Member, Conservation and Survey Division Management Team (5/99 to 7/03).
Chair, Outreach Committee (Committee Reappointed 8/97)
Member, CSD Strategic Planning Committee (Committee Reappointed 3/95)
Member, Computing Committee (Resigned 9/95)

Community Service:

Head Women's Soccer Coach, Lincoln Lutheran High School, January 2008 to Present
Youth Soccer Coach – Lincoln Spirit Soccer Club and YMCA 1996 to Present
State Director of Education, National Soccer Coaches Association of America, January 2007 to September 2012
Member, Executive Board, Lincoln Spirit Soccer Club, June 2002 to September 2012
Director of Coaching, Lincoln Spirit Soccer Club, June 2002 to September 2012
District One Commissioner, Nebraska State Soccer Association, December 2005 to November 2007
Assistant Women's Soccer Coach, Lincoln Lutheran High School, January 2004 to December 2007.
Assistant Women's Soccer Coach, Lincoln Northeast High School, January 2002 to May 2003
Assistant Women's Soccer Coach, Nebraska Wesleyan University, August 1998 to December 2000