

BRENT THOMAS LADD
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Program Management: Strategic Thinking + Collaboration + Inclusion + Outreach

- 20+ Years Higher Ed Program Management • Fostering Partnerships & Collaboration
- \$50M Grant Writing, Evaluation, Reporting • K – Gray Experiential Learning Initiatives

*Award-winning education and outreach serving
faculty, students, adult learners, community, and state organizations*
Purdue Early Career Award • Bravo Awards • Distance Ed Award • Brave Leaders, Inc. Certification

EDUCATION

MS, Ethology, Purdue University **1993**

- Minor specialization: Ethics & Philosophy of Mind

BS, Animal Sciences & Agribusiness, Purdue University **1990**

- Minor: Music Theory

Ph.D. level coursework and research in Human Dimensions of Natural Resources,
Purdue University, advisor: Shorna Broussard

LAND-GRANT HIGHER EDUCATION WORK EXPERIENCE

Center for Science of Information, Discovery Park, Purdue University **Oct 2010 - present**
Director of Education

Fostering a community of practice nationwide

- Conceived and led development of Information Frontiers Learning Initiative, the education and diversity arm of a \$50M national-level research and education center with 11 university partners
- Coordinated and led curriculum development with faculty reaching .5M online learners and 7,000 classroom-based learners across U.S.
- Led evaluation, reporting, presentation of outcomes to university, advisory, and NSF review panels
- Supervised strategic communications, website, social media outreach, education budgets
- Facilitated a significant increase in inclusive diversity and broader participation impacts
- Designed and oversaw events and trainings engaging 4,700+ in-person across the U.S.
- Fostered a community of practice around the emerging science through team collaboration pathways
- Presented translational results to the STEM community

Center for the Environment, Discovery Park, Purdue University **Feb 2007 - Oct 2010**
Learning & Engagement Coordinator

Engaging students, faculty, organizations, and graduate programs

- Developed and launched recruiting plan leading to 900% increase in program applications for Ecological Sciences & Engineering IGP, while quadrupling underserved student matriculation
- Led annual campus-wide Environmental Entrepreneurship Initiative leading to national competitions
- Taught *Foundations of Sustainability: Ecological Concepts and Applications (AGRY 598)* and co-taught *Ecological Sciences and Engineering Seminar (CIVL 597)*

- Supervised committees for annual university student conference series
- Conceived and co-chaired the inaugural Rivers Rally conference for the people of Indiana with 200 attendees representing all levels of government, colleges and universities, non-profits, and community leaders
- Co-organized and co-taught the first Permaculture Design course at Purdue University
- Presented keynotes and talks for organizations reaching > 1,000 people
- Co-advisor of service-learning EPICS outreach course

Purdue Extension, Ag & Bio Engineering, Purdue University

March 1999 – Feb 2007

State Water Quality Extension Specialist

Outreach and education to communities, residents, students, and organizations

- Facilitated and managed multiple project stakeholder committees
- Co-developed and co-led the award-winning Indiana Watershed Leadership Academy training, graduating over 300 community leaders since its inception
- Taught stream ecology, watershed science, and soil health to more than 1,000 students
- Co-authored series of educational publications for outreach to Indiana residents – 15,000 copies requested to date, and three blue ribbon awards from ASAE
- Led community outreach and education with the Purdue Water Quality Extension program working with county leaders and over 4,000 landowners on technical assistance and support
- Spearheaded and served as PI for USDA-NCR-SARE on-farm sustainable agriculture grant project investigating soil health and whole farm planning
- Co-created and supervised interactive exhibits for eight Indiana State Fairs, directly engaging thousands of children and adults
- Co-advised local high school team selected the Envirothon National Champion runner-up 1999

Wild Woods Wisdom, Outdoor Experiential School

1994 – Aug 2001

Owner

- Developed hands-on learning presentations and workshops incorporating natural history, environmental science, wilderness skills, and Native American oral history
- Presented to more than 5,000 K-12 students, inspiring them to become more knowledgeable about the natural world
- Guest instructor for anthropology courses at Indiana University Northwest – Gary
- Created museum quality pieces representing American frontier and Native American tools, clothing, basketry, hunting equipment, and shelter for museums and historical re-enactment enthusiasts.

LEADERSHIP & EDUCATION TRAINING

Brave Leaders, Inc Certification • SARE Sustainable Agriculture Continuing Education Program • Permaculture Design Certification • Natural Resources Leadership Development Institute • Watershed Planner Certification • ArcGIS • Human Dimensions of Natural Resources (Purdue) • Leadership Communication (Northwestern) • Building Your Leadership Skills (HEC Paris)

PROJECT MANAGEMENT, PLATFORMS, SOFTWARE

Strategic Planning • Program Evaluation • Staff & Student Supervision • Budgets • Committee Facilitation • edX • FutureLearn • Blackboard CMS • Adobe Creative Suite • MS Office Suite • Qualtrics • SPSS • Education Data Statistical Analysis • Camtasia • Grounded Theory Atlas.ti • WordPress

CO-WRITER & SENIOR PERSONNEL, RESEARCH & EDUCATION GRANTS

National Science Foundation. 2015. Emerging Field of Science of Information: Science and Technology Center. Co-wrote with W. Szpankowski, et. al. (\$22.5M)

National Science Foundation. 2012. The Science of Information: Bringing Many Disciplines Together. Co- wrote with D. Kumar, Bryn Mawr College, and M.D. Ward, Purdue. (\$194,000).

EPA-IDEM, Nonpoint Source-319. 2009 - 2011 Wabash River: Lafayette-West Lafayette Reach Proposal for Watershed Management Plan. Co-wrote with LLOW faculty team at Purdue and Wabash Enhancement Corporation. (\$700,000)

Center for the Environment, Purdue University. 2007 – 2008. Positioning the Indiana Watershed Leadership Academy for National Recognition through Innovative e-Learning Tools (Co-wrote with Jane R. Frankenberger and Shorna Broussard). (\$25,000)

EPA-IDEM, Nonpoint Source-319. 2006-2008. Indiana Watershed Leadership Program. (Co-wrote with Jane R. Frankenberger and Shorna Broussard). (\$212, 400).

USDA-SARE. 2005 – 2007. Value-added Sustainable Animal Production with Natural and Organic Leathers. FNC05- 549. Wrote as the PI (\$5,500)

USDA-SARE Farmer-Rancher Project. 2003-2005. Investigating the use of compost tea for rapid restoration of soil ecology on Indiana farms. Co-PI with Jim Tarnowski, Indiana Landowner/Farmer (\$35,541)

EPA-IDEM, Nonpoint Source-319. 2001-2004. Indiana Farm and Home Assessment for Water Quality Protection. (Co-wrote with Jane R. Frankenberger). (\$257,589).

EPA-IDEM, Nonpoint Source-319. 1999-2001. Indiana Farm*A*Syst/Home*A*Syst Coordinator. (with Jane R. Frankenberger). (\$147, 826).

CONFERENCE AND EXTENSION PUBLICATIONS

Ladd, B.T. 2021. Longitudinal Effect of Collaboration on Graduate Student Scholarship and Formation of a Community of Practice within a Large-Scale Research Consortium. [manuscript submitted for publication].

Jim, C.K., Grant, A., Ladd, B.T. 2021. Visualization of the Digital Divide Among K-12 Students: Open Data, Quantitative Measures, and Policy Implications. October 15, 2021. In (forthcoming) *Proceedings of Northeast Educational Research Association 52nd Annual Conference*.

Ladd, B.T. 2020. Legacy Outcomes of the Information Frontiers Learning Initiative: An Inclusive Education Program of the Science of Information NSF Science and Technology Center (2010 – 2020). July 20, 2020. White Paper, published for the National Science Foundation and Center for Science of Information, Purdue University. <https://soihub.org/site/assets/files/5982/legacy-white-paper-ifl.pdf>

Byrd V., Roark K., and Ladd B.T. 2020. Usability of Data Visualization Activity Worksheets in the Context of a Critical Data Visualization Workshop: Findings from a Usability Survey. June 26, 2020, American Society for Engineering Education, 127th Annual Conference, Montreal, CAN (presented virtually). https://soihub.org/docs/UsabilityOfDDVisWorksheets_ASEE2020_FinalVersion_wCoversheet.pdf

Ladd, B.T. 2019. The Information Frontiers Program: Expanding Student Capacity for Crossing Domain and Institutional Borders. October 24, 2019, Association for Interdisciplinary Studies 41st Annual Conference, University van Amsterdam, Netherlands. https://soihub.org/legacy/posters/Ladd_Brent_Abstract-Lessons-AIS-2019.pdf

- Ladd, B.T. and Ward, M.D. 2019. Training Students Concurrently in Data Science and Team Science. July 28, 2019, American Statistical Association, Joint Statistical Meetings, Denver, Colorado, USA
- Ladd, B.T. and Brown, R.E. 2019. Broader Impacts of the Information Frontiers Integrated Education and Diversity Program. May 1, 2019, National Alliance for Broader Impacts Summit, Tucson, Arizona, USA
- Ladd, B.T. 2018. Case Study of Interdisciplinary Student Research Teams: Factors, Outcomes, and Lessons Learned. May 22, 2018, Institute for Translational Science, Science of Team Science Conference, Galveston, Texas, USA
- Broussard, S.R., Ladd, B.T., Frankenberger, J.R., Washington-Ottombre, C., and Haley, A. 2006. Indiana Watershed Groups: Exploring Activities, Characteristics, Barriers, Information Use, and Training Needs. Statewide survey report, 45 pgs. Purdue University.
- Ladd, B.T. and Frankenberger, J.R. 2004. On-Farm Soil Monitoring for Water Resource Protection, WQ-43. 12 pgs, Purdue Extension.
- Ladd, B.T. and Frankenberger, J.R. 2004. Field Assessment for Water Resource Protection, WQ-42. 24 pgs, Purdue Extension.
- Ladd, B.T. and Frankenberger, J.R. 2003. Management of Ponds, Wetlands, and Other Water Reservoirs to Minimize Mosquitoes, WQ-41-W. 8 pgs, Purdue Extension.
- Ladd, B.T. and Frankenberger, J.R. 2001. Livestock Confinement Assessment for Water Resource Protection. WQ-40. 12 pgs, Purdue Extension.
- Ladd, B.T. and Frankenberger, J.R. 2001. Pasture Assessment for Water Resource Protection. WQ-39. 12 pgs, Purdue Extension.
- Frankenberger, J. R. ; Cooper, B. C. ; Ladd, B. T. 2000. Safe Water for the Future: Educating Communities and Landowners to Implement Source Water Protection. 2000 ASAE Annual International Meeting, Milwaukee, Wisconsin, USA, 9-12 July 2000 2000 pp.1-10
- B.T Ladd, Ladd, J.K, Albright, J.L. 1993. The Importance of Human–Pig Relationships, *J. Anim. Sci.*, 71, p. 111
- B.T. Ladd and Albright, J.L. 1993. The Behavior and Well-being of Reproductive Sows (*Sus scrofa domestica*) During Interval Feeding Regime, Proceedings of the Animal Behavior Society Annual Meeting, Davis, CA, July 24-29.
- Ladd, J.K., Albright, J.L. Beck, A.M., Ladd, B.T. 1992. Behavioral and Physiological Studies on the Effect of Music on Animals. *J. Anim. Sci.*, 70 (Suppl. 1) p. 170
- Coe, B.L., Albright, J.L., Kettelkamp, J.R., Ladd, B.T. 1991. Resting Postural Differences Between Tethered and Untethered Holstein Heifers and Bull Calves. *Beef/Dairy Day Report*, 69-71.

SELECTED KEYNOTES AND INVITED PRESENTATIONS

“Diversity and Culture of Inclusion: Perspectives from a Decade of an NSF Science of Technology Center”, Engineering Research Center Planning Grant Team, Purdue University, December 1, 2021.

“Broader Impacts of the Center for Science of Information’s Integrated Education and Diversity Program – Legacy and Lessons Learned”, The National Science Foundation, CISE Directorate, December 11, 2019.

“Evaluating a National Education Program”, The National Science Foundation, Office of Integrative Activities, Science & Technology Centers Partnerships, August 31, 2017.

“Permaculture: A Brief Introduction”, *An Introduction to Urban Agriculture* course, Purdue University, Horticulture & Landscape Architecture Department, October 5, 2016.

“An Introduction to Permaculture Principles”, Purdue County Extension Educators, March 2011.

“An Ecological Odyssey”, Indiana Master Gardener Annual Conference, June 19, 2010.

“Using Nature’s Principles to Design a Renewable Agriculture”, Agricultural & Biological Engineering Department graduate student professional development seminar series, January 22, 2010.

“Permaculture for a Sustainable Home”, Purdue University Green Week Talk, West Lafayette Library, September 23, 2009.

“The Role of Academic Institutions in Solving Real World Environmental Challenges”, Lafayette Green Drinks meeting, September 2, 2009.

“Life in Soil*Soil in Life”, Permaculture Intensive Course, Purdue University, West Lafayette, June 4, 2009.

“Innovating Ideas to Prevent and Solve Environmental Problems: Student Environmental Entrepreneurship Initiative”, Indiana Department of Environmental Management Partners for Pollution Prevention, December 3, 2008.

“Natural History of Big Pine Creek Watershed”, Friends of Big Pine Creek, April 2008.

“The World of Water”, Purdue President’s Council Back-to-Class, February 2008.

“The Science of Watersheds and Water Quality”, Tippecanoe County Master Naturalists Class. April 2007.

“Strengthening the Capacity of Community-Based Watershed Efforts through the Indiana Watershed Leadership Academy”, Plenary session, Innovations in Reducing Nonpoint Source Pollution Conference, November 28-30, 2006.

“Natural History and Water Quality in Indiana”, Natural Resources and Environmental Science Program, Purdue University, March 2005.

“All About Water Quality”, Master Naturalist Training, Sycamore Trails RC & D, July 2003.

“Holism: Holistic Thinking and Planning for a Positive Future”, Science and Theology Forum, Wesley Foundation, September 2002.

PROFESSIONAL AWARDS

XPRIZE 1st Place Team – 2021 • Purdue Bravo Award – 2021 and 2019 • Excellence in Distance Education Award – 2010, & 2018 (finalist) • Governor’s Proclamation, Rivers Month – 2007 • Extension Early Career Award – 2006 • Purdue University Senate Scholarship – 2003 • APSAC Professional Development Awards – 2000 & 2017 • ASAE Blue Ribbon Awards – 2000 (Website), 2003 (Publication), 2004 (Publications – 2)