TOM J. MCCONNELL

Professor
Department of Biology
Ball State University

EDUCATION

Degree	Date	University	Major
Ph.D.	08-06-2006	Purdue University	Science Education
M.S.	08-31-2000	IU-Purdue Fort Wayne	Secondary Education
B.S.	12-11-1987	Purdue University	Biology Education

PROFESSIONAL EMPLOYMENT

Ball State University – Department of Biology, College of Sciences and Humanities,
Professor, August 2020 – present
Associate Professor, August 2014 – August 2020
Assistant Professor, August 2008 – August 2014
Michigan State University – Research Associate, Problem-Based Learning Project for Teachers, Division of Science and Mathematics Education. July 2006 – Aug. 2008
Purdue University – Graduate Teaching Assistant, August 2002 – June 2006
Courses Taught – Bio for Elem Teachers, Elementary Sci Teaching Methods
East Noble High School – Biology Teacher, August 1992-July 20002
Courses Taught – Biology, Environmental Science, Web Design, Chemistry
North White High School – Biology Teacher, August 1988-July 1992
Courses Taught – Biology, Basic Biology, Botany, Zoology, 8th grade Life Science

REFEREED PUBLICATIONS – 32 peer-reviewed books and articles.

i. **McConnell, T. J.,** Karasch, B., Lancaster, R., Linville, A., Ward, J. (in review). Learning in minnows begins in the egg! An ADI lesson in animal behavior and science practices. *The Hoosier Science Teacher.* HASTI. Submitted March 19, 2025.

ii. **McConnell, T. J.** (in review). Constructing a transformative strategy to bridge the publication gap for education researchers in the Global South. *Special Issue of The Global Journal of Transformative Education*, *Transformative Education in the Global South.*

iii. Ndemanu, M. T., Coronel-Molina, S. M., **McConnell, T. J.,** Davis, E. K., & Ndiku, J. M. [Eds.] (2025). *The Role of Transformative Education for Sustainable and Economic Development of Africa*. Cambridge Scholars Publishing. ISBN 978-1-0364-4461-7.

iv. **McConnell, T. J.** (2025). The importance of becoming information creators: The role of local publication in supporting a sustainable transformative educational system. In M.T. Ndemanu, S.M. Coronel-Molina, T.J. McConnell, & E.K. Davis, (Eds) *The Role of Transformative Education for Sustainable and Economic Development of Africa*. Cambridge Scholars Publishing. ISBN 978-1-0364-4461-7.

v. **McConnell, T. J.** (2023). Preparing to View the 2024 Total Eclipse Safely: A Video Article. *The Hoosier Science Teacher, 46*(2), 5.

vi. **McConnell, T. J.** (2022). Adapting to the New Indiana Science Standards: A 3D Lesson Planning Template. *The Hoosier Science Teacher*, *45*(2), 15-23.

vii. **McConnell, T. J.,** & Giorgio-Booher, B. (2022). Children's literature to develop a scientific mindset and environmental decision-making: The *Conservation Tales* series. In P. Short, H. Henson, & J. McConnell, Eds., *Age of Inference: Cultivating a Scientific Mindset.* Information Age Publishing. ISBN: 978-1-64802-798-7

viii. **McConnell, T. J.,** & Giorgio-Booher, B. (2020). Collaborative teams for self-publishing – A model for creating locally relevant educational books. *Global Journal of Transformative Education, 2,* 33-45.

ix. **McConnell, T. J.** (2020). Reigniting the spark of childhood inspiration: A biology educator's journey to Kenya's Maasai Mara. *The Hoosier Science Teacher, 43*(2), 8-18.

x. **McConnell, T. J.,** Giorgio-Booher, B., Reneker, M., Bockover, J., & Page, A. (2019). Manatee ID Card Game: Student activity to practice authentic science process skills. *The Hoosier Science Teacher, 43*(1), 14 p.

xi. **McConnell, T. J.**, Foster, T., & Schilten, M. (2019). Inquiry at the botanical gardens: Practicing Science Processes during a Field Trip to the Indianapolis Zoo. *The Hoosier Science Teacher, 42*(2), 4 pages.

xii. **McConnell, T. J.,** Parker, J. M., & Eberhardt, J. (2019). Problem-based learning for responsive and transformational teacher professional development. *Global Journal of Transformative Education 1*(1), 18-25 pgs. DOI 10.14434/gjte.v1i1.25848

xiii. **McConnell, T. J.,** Parker, J. M., & Eberhardt, J. (2018). *Problem-Based Learning in the Physical Science Classroom, K-12.* NSTA Press. ISBN 978-1-941316-21-4

xiv. **McConnell, T. J.**, Parker, J. M., & Eberhardt, J. (2017). *Problem-Based Learning in the Earth-Space Science Classroom, K-12.* NSTA Press. ISBN 978-1-941316-19-1,

xv. **McConnell, T. J.,** Parker, J. M., & Eberhardt, J. (2016). *Problem-Based Learning in the Life Science Classroom, K-12.* NSTA Press. ISBN 978-1-941316-20-7

xvi. Stump, S., Bryan, J., & **McConnell, T. J.** (2016, April). Making STEM connections through inquiry: Acting as quality control engineers and service providers, students collaborate to engage, explore and explain their results. *Mathematics Teacher, (109)*8, 576-583.

xvii. Aurah, C. M., Cassady, J. C., & **McConnell, T. J.** (2014). Genetics problem solving in high school testing in Kenya: Effects of metacognitive prompting during testing. *Electronic Journal of Science Education, 18*(8). 2-26. http://ejse.southwestern.edu/issue/view/1152.

xviii. Aurah, C. M. & **McConnell, T. J.** (2014). Comparative study on pre-service science teachers' self-efficacy beliefs of teaching in Kenya and the United States of America. *American Journal of Educational Research, 2*(4), 23-29.

xix. Aurah, C. M., Cassady, J. C., & **McConnell, T. J.** (2014). Predicting problem solving ability from the metacognition and self-efficacy beliefs on a cross validated sample. *British Journal of Education, 2*(1), 49-72.

xx. **McConnell, T. J.** (2013). Guidelines for successful science fair projects: What do the judges want? Invited manuscript submitted to *The Hoosier Science Teacher, 39*(2), 5-10.

xxi. **McConnell, T. J.,** Parker, J. M., & Eberhardt, J. (2013). Problem-based learning as an effective strategy for science teacher professional development. [Special Issue] *The Clearing House: A Journal of Educational Strategies, Issues and Ideas, 86*(6), 216-233. DOI: 10.1080/00098655.213.826486.

xxii. **McConnell, T. J.**, & Makowski, S. D. (2013). The incredible semipermeable egg: An "inquirized" activity for teaching osmosis. *The Hoosier Science Teacher, 38*(4), 144-150.

xxiii. **McConnell, T. J.,** Parker, J. M., & Eberhardt, J. (2013). Assessing teachers' science content knowledge: A strategy for assessing depth of understanding. *Journal of Science Teacher Education, 24*(4), 717-743. DOI: 10.1007/s10972-01309342-3 IF: 1.53

xxiv. **McConnell, T. J**., Parker, J. M., Eberhardt, J., Koehler, M. J., & Lundeberg, M. A. (2013). Virtual professional learning communities: Videoconferencing as a tool to facilitate teacher learning. *Journal of Science Education and Technology, 22*(3), 267-277. DOI: 10.1007/s10956-102-9391-y IF: 2.58

xxv. Zhang, M., Lundeberg, M., **McConnell, T. J.**, Koehler, M. J., & Eberhardt, J. (2010). Using questioning to facilitate discussion of science teaching problems in teacher professional development. *Interdisciplinary Journal of Problem-based Learning, 4*(1), 57-82. *IF: 1.32*

xxvi. **McConnell, T. J**., Zhang, M., Koehler, M. J., Lundeberg, M. A., Urban-Lurain, M., Parker, J. M., & Eberhardt, J. (2008). A lesson in teaching, starring you. *Journal of Staff Development, 29*(4), 39-42.

xxvii. **McConnell, T. J.,** Lundeberg, M. A., Koehler, M. J., Urban-Lurain, M., & Zhang, T. (2008). Video based teacher reflections: What is the real effect on reflections of in-service teachers. In *Proceedings of the 2008 International Conference of the Association of Science Teacher Educators* (pp. 1-14).

xxviii. Lundeberg, M., Koehler, M., Eberhardt, J., Parker, J., Zhang, M., **McConnell, T.**, & Weizman, A. (2007). Preparing science teachers using a problem-based learning framework. *Conference proceedings of the International Academic Conference of Preparing Quality Science Teachers for Elementary and Secondary Schools*. National Science Council (Taiwan), May 31 – June 2, 2007. Taipei, Taiwan.

xxix. Capobianco, B. M., **McConnell, T. J**., Priddy, M., & Schellenberger, L. (2006). Engaging in collaborative action research as prospective science teacher educators. In P. Brewer & M. Firmin (Eds), *Ethnographic and qualitative research in education: Proceedings of the seventh annual conference.* Cambridge Scholars Press. pp. 97-106

xxx. Capobianco, B. M., **McConnell, T. J.,** Priddy, M., & Schellenberger, L. (2006, January). *Collaborative action research on becoming science teacher educators*. Proceedings of the Annual Meeting of the Association of Science Teacher Education, Portland, OR.

xxxi. **McConnell, T. J**. (2006). Defining technology integration in the science classroom: A question of pedagogical reasoning. *The Hoosier Science Teacher, 31*(4), 102-109.

xxxii. **McConnell, T. J.** (2006). *Using collaborative reflection to build integration skills among preservice elementary science teachers.* [published dissertation]. West Lafayette, Purdue University. ProQuest publication #AAI3251658.

NON-REFEREED PUBLICATIONS

Conservation Tales books – 24 books available from Airway Publishing.

i. **McConnell, T. J.,** & Stallard, S. [Translated by Caecy Franz] (2025). *Manatíes*. (In Spanish). 979-8-9856169-6-5.

ii. Rodabaugh, A. & **McConnell, T. J.** [Translated by Dr. Juanita Rodriguez and Alexandra Marshall.] (2025). *Conservation Tales: Arrecifes Coralinos*. (In Spanish) ISBN 979-8-9856169-8-9.

iii. Sherer, Z. & **McConnell, T. J.**). [Translated by Dr. Juanita Rodriguez and Alexandra Marshall.] (2025). *Conservation Tales: Corales*. (In Spanish). ISBN 979-8-9856169-7-2.

iv. Rodabaugh, A. & **McConnell, T. J.** (2023). *Conservation Tales: Coral Reef Ecosystem*. ISBN 979-8-9856169-3-4.

v. Sherer, Z. & **McConnell, T. J.** (2023). *Conservation Tales: Corals*. ISBN 979-8-9856169-2-7.

vi. Owens, A. & **McConnell, T. J.** [Translated by Alexandra Marshall]. (2023). *Conservation Tales: Mariposas Monarcas.* (In Spanish). ISBN 979-8-9856169-5-8

vii. Sherer, Z. & **McConnell, T. J.** [Translated by K. Kasmauskis]. (2022). *Conservation Tales: Guacamayas.* (In Spanish). ISBN 979-8-9856169-0-3.

viii. Owens, A. M., & **McConnell, T. J.** [Translated by K. Kasmauskis]. (2022). *Conservation Tales: Perezosos.* (In Spanish). ISBN 979-8-9856169-1-0.

ix. Sherer, Z. & **McConnell, T. J.** (2022). *Conservation Tales: Macaws.* ISBN 978-0-9600063-9-7.

x. Owens, A. M., & **McConnell, T. J.** (2022). *Conservation Tales: Sloths.* ISBN 978-0-9600063-0-4.

xi. **McConnell, T. J.,** & Owens, A. M. (2021). *Conservation Tales: Monarch Butterflies.* ISBN 978-0-9600063-7-3.

xii. **McConnell, T. J.,** & Jessup, A. (2021). *Conservation Tales: Invasive Carp.* ISBN 978-0-9600063-8-0.

xiii. **McConnell, T. J.**, & Luginbuhl, S. (2020). *Conservation Tales: Orangutans.* ISBN 978-0-9600063-5-9.

xiv. **McConnell, T. J.**, & Reidy, A. (2020). *Conservation Tales: Tigers.* ISBN 978-0-9600063-6-6.

xv. **McConnell, T. J.,** Ewing, K, & Page, A. (2019). *Conservation Tales: Giraffes.* ISBN 978-0-9600063-4-2.

xvi. **McConnell, T. J.,** Bloom, A., & Bockover, J. (2019). *Conservation Tales: Elephants.* ISBN 978-0-9600063-3-5.

xvii. Page, A. & **McConnell, T. J.** (2019). *Conservation Tales Junior: Bats.* ISBN 978-0-9600063-1-1.

xviii. Bockover, J. L. & **McConnell, T. J.** (2019). *Conservation Tales Junior: Bees.* ISBN 978-0-9600063-2-8.

xix. **McConnell, T. J.** & Brown, M. J. (2018). *Conservation Tales: Seahorses.* ISBN 978-0-9863369-8-0.

xx. **McConnell, T. J.** (2018). *Conservation Tales: Sea Turtles.* ISBN 978-0-9863369-9-7.

xxi. **McConnell, T. J. & Stallard, S.** (2018). *Conservation Tales: Manatees.* 978-0-9863369-7-3.

xxii. **McConnell, T. J.** (2018). *Conservation Tales: Salamanders.* ISBN 978-0-9863369-6-6.

xxiii. **McConnell, T. J.** (2018). *Conservation Tales: Bees.* ISBN 978-0-9863369-5-9.

xxiv. **McConnell, T. J.** (2017). *Conservation Tales: Bats.* ISBN 978-0-9863369-4-2.

xxv. **McConnell, T. J.** (2017). *Conservation Tales: The Cerulean Warbler.* ISBN 978-0-9863369-3-5.

Other Non-Refereed Books

xxvi. **McConnell, T. J.** (2015). *Music from the Heart: Original Songs for Mountain Dulcimer.* Airway Publishing. ISBN 978-0-9863369-0-4.

xxvii. **McConnell, T. J.** (2015). *Baritone Dulcimer Jam Book.* Airway Publishing. ISBN 978-0-986339-1-1.

xxviii. **McConnell.** T. J. (2014). *Biology Concepts for Educators: An Inquiry Based Approach*. [eBook]. Great River Technologies. ISBN 978-1-6154991-5-1.

Editor-Reviewed Publications – 6 book chapters and articles published after editorial review.

xxix. Ndemanu, M. T., Coronel-Molina, S. M., **McConnell, T. J.,** Davis, E. K., & Ndiku, J. M. (2025). Introduction: Framing Transformative Education for Social and Economic Change in Africa. In M.T. Ndemanu, S.M. Coronel-Molina, T.J. McConnell, E.K. Davis, & J.M. Davis, (Eds) *The Role of Transformative Education for Sustainable and Economic Development of Africa*. Cambridge Scholars Publishing. ISBN 978-1-0364-4461-7.

xxx. Oliver, E., Day, C., & **McConnell, T. J.** (2022). Ball State University opens new Environmental Education Center. *The Hoosier Science Teacher, 45*(1), 16-18. DOI #10.14434/thst.v45i1.34620.

xxxi. **McConnell, T. J.** (2022). Yes, you CAN write for THST! Tips and strategies to make submitting articles easier. *The Hoosier Science Teacher, 45*(1), 4 p. DOI #10.14434/thstv45i1.34457.

xxxii. **McConnell, T. J.,** Eberhardt, J., Lundeberg, M. A., Parker, J. M., Koehler, M. J., Urban-Lurain, M., & Stanaway, J. C. (2008). The PBL Project for Teachers: Using problem-based learning to guide K-12 science teachers' professional development. *MSTA Journal, 53*(1), 16-21.

xxxiii. **McConnell, T. J.**, Stanaway, J. C., Eberhardt, J., Parker, J. M., Lundeberg, M. A., & Koehler, M. J. (2008). Building a better PBL problem: Lessons learned from the PBL Project for Teachers. *MSTA Journal, 53*(1), 47-53

xxxiv. Trommater, P., Farlee, R., Hollinshead, G., Larkins, M., Stanway, J. C., & **McConnell, T. J.** (2008). Weather across the elementary curriculum. *MSTA Journal, 53*(1), 32-34.

VIDEO & DIGITAL PRODUCTIONS – 4 published digital videos

i. **McConnell, T. J.**, Karasch, B., Lancaster, R., & Linville, A. (2025). Fish Go To School? [Three-Video Series]. From the *Social information use and communication in aquatic embryos* project (NSF-funded). Ball State University. Available at https://strides.bsu.edu/fish-go-to-school-adi-lesson/

ii. Karasch, B., Lancaster, R., Linville, A., & **McConnell, T. J.** (2025) Learn to Survive! [Video]. From the From the *Social information use and communication in aquatic embryos* project (NSF-funded). Available at https://strides.bsu.edu/embryolearn/.

iii. Geron, K, & Oakley, F. (April, 2024). *The Universe Under the Sea: Exploring Coral Ecosystems.* **T. J. McConnell** & D. Thompson, Executive Producers. [Planetarium Show] Charles W. Brown Planetarium, Ball State University. April 29, 2024.

iv. **McConnell, T. J.** (December, 2023). *Preparing to View the 2024 Total Eclipse Safely*. [YouTube video]. STRIDeS Project. December 18, 2023. https://www.youtube.com/watch?v=nGaRb916EBc

v. Oakley, F. (June, 2023). *Restoring our Coral Reefs.* **T. J. McConnell** & B. Giorgio-Booher, Executive Producers. [YouTube documentary video] Airway Publishing & STRIDeS Project. June 1, 2023. https://www.youtube.com/watch?v=F4nq24jOHEc&list=PPSV

GRANTS – 19 external and internal grants totaling $1,298,733.96

i. *Conservation Tales: WEEC Faculty Travel Support.* (Approved October 3, 2024). ASPIRE Faculty International Travel AY 24 Grant. Tom J. McConnell. Submitted September 18, 2023. Awarded: $700.

ii. *Conservation Tales IL Project – ESC Conference Travel Support.* (Approved September 18, 2023). College of Fine Arts Student Curriculum Fund. Barbara Giorgio-Booher & Tom J. McConnell, PIs. Total Award: $1000.

iii. *Conservation Tales: Exploring Coral Reef Restoration.* (Approved August 21, 2023). ASPIRE Student Travel Grant. Three awards granted to Rachel Baker, Abigail Clone, Zoe Sherer for a total of $900.

iv. *Social information use and communication in aquatic embryos*. (Approved June 28, 2022). National Science Foundation, IOS Division, Behavioral Systems Cluster. PI: Jessica Ward. Senior Personnel: **Tom J. McConnell**. Total award: $487,606.

v. *Conservation Tales Immersive Learning Program.* (Approved March 12, 2020). Office of Immersive Learning Sustainable Course Program. **Tom J. McConnell** & Barbara Giorgio-Booher, PIs. Total award - $47,614

vi. *Conservation Tales Crowdfunding Campaign* (February 3 – March 3, 2020). BSU Foundation Crowdfunding program. **Tom J. McConnell** & Barbara Giorgio-Booher, CoPIs. Total award – $4,496.21

vii. *Conservation Tales: Community Outreach at the Midwest Museum of Natural History.* (Approved March 16, 2019). College of Science and Humanities Immersive Micro-grant. PIs: **Tom J. McConnell** & Barbara Giorgio-Booher. Total award - $1000.

viii. *Conservation Tales: Production of Manatee Outreach Materials.* (Approved November 13, 2018). College of Sciences and Humanities Immersive Micro-grant. PIs: **Tom J. McConnell** & Barbara Giorgio-Booher. Total award - $1000.00.

ix. *Conservation Tales: Travel Support for Community Day Event.* (Approved November 6, 2018). PIs: **Tom J. McConnell** & Barbara Giorgio-Booher. Midwest Museum of Natural History. Total award: $400.00.

x. *Conservation Tales: Developing Community Outreach for Environmental Education and Literacy. (*Approved March 28, 2018*).* PIs: **Tom J. McConnell** & Barbara Giorgio-Booher. Discovery Grant, Discovery Women's Group. Funds awarded - $15,261.

xi. *King's Bay manatee tour and book research.* (Approved February 17, 2018.) PIs: **Tom J. McConnell** & Barbara Giorgio-Booher. Sponsorship by Captain Mike's Dive with the Manatees, Crystal River, FL. Total award: $700.00.

xii. *Conservation Tales; Immersive Course Student Travel.* (Approved December 20, 2017). Office of Immersive Learning Student Travel fund. **Tom J. McConnell**, PI; Barbara Giorgio-Booher, Co-PI. Total award - $1273.75.

xiii. *Conservation Tales: Children's Book Production Team. (*Approved November 28, 2017). College of Sciences and Humanities $2000

xiv. Immersive Micro-Grant. **Tom J. McConnell**, Principal Investigator, Barbara Giorgio-Booher, Co-PI. Total award - $2000.

xv. *Conservation Tales: Children's Book Production Team. (*Submitted November 15, 2017). College of Fine Arts Immersive Mini-Grant. Barbara Giorgio-Booher, Principal Investigator; **Tom J. McConnell**, Co-PI. Total award - $1643.

xvi. *Summer Institute for STEM Curriculum Development.* (Approved May 28, 2017). PI: Chris Edwards. Co-PIs: Susan Johnson, John Jacobson, Sam Snideman, Ann Blakey, **Tom J. McConnell,** David LeBlanc, Keri Rogers, Ryan Jeske. Grant from the Indiana Department of Education. Total award**: $90,000.**

xvii. Engineering STEM Success: The Warsaw Community Schools/Ball State University Mathematics and Science Partnership. (Approved April 2012). PI: Sheryl Stump. Co-PIs: Joel Bryan, **Tom J. McConnell,** Susan Johnson. Grant from the Indiana Department of Education's Math and Science Partnership Program. Total funds rewarded**:** *$635,440.00*

xviii. Inquiry Science Apps for the iPad (Approved March, 2012). Emerging Media Initiative Proposal Preparation Grant. **Tom J. McConnell**, Principal Investigator. Total award - $5000.

xix. Elluminate-ing Science Student Research. (Approved Dec. 2009). Proposal submitted to Sigma Xi's Science, Math and Engineering Education grant (Proposal #167-10) on 10-14-2009. **Tom McConnell**, Principal Investigator. $700.00

INVITED & REFEREED PRESENTATIONS – 69 conference and seminar presentations

i. **McConnell, T. J.** (2025). Evidence that Our Students are Transformed: Assessing the Impact of Transformative Education. Presentation at the 4th World Conference on Transformative Education, Cape Town, South Africa. July 2, 2025.

ii. **McConnell, T. J.** (2024). Engage with the Science Education Community through *The Hoosier Science Teacher.* Invited presentation at the 2024 HASTI Mini-Conference, Noblesville, Indiana. October 12, 2024.

iii. **McConnell, T. J.** (2024) *Shifting Toward Digital Storytelling to Engage and Teach STEM Learners*: *Revising SCI 150 Methods Course*. Invited presentation at the 2024 Excellence in Teaching Award Colloquium, Ball State University. April 10, 2024.

iv. Coronel-Molina, S. M., Ndemanu, M. T., Méndez Arámburu, J., **McConnell, T. J.,** Akana, D., Folefac, E., Guzmán Torres, A. Y., Rodríguez Colon, J., Rios., P. N., Severino Valdez, C. E., Cruz Garcia, S. (2024). *Rethinking Transformative Education in the 21st Century*. Panel discussion at the 3rd World Conference on Transformative Education, San Juan, Puerto Rico. April 5, 2024.

v. **McConnell, T. J**., Ndemanu, M. T., & Colonel-Molina, S. M. (2024). *Let's Talk About Successful Writing for Academic Journals: Polishing an important skill for educational transformation*. Panel discussion at the 3rd World Conference on Transformative Education, San Juan, Puerto Rico. April 4, 2024.

vi. **McConnell, T. J.,** & Giorgio-Booher, B. (2024). *Student-Scientist Collaborations to Develop Culturally and Linguistically Relevant Educational Materials: The Conservation Tales Project*. Presentation at the 3rd World Conference on Transformative Education, San Juan, Puerto Rico. April 4, 2024.

vii. Colonel-Molina, S. M., Ndemanu, M.T., & **McConnell, T. J.** (2024). *Reimagining the Vision, Mission, and Activities of the Global Institute for Transformative Education.* Panel discussion at the 3rd World Conference on Transformative Education, San Juan, Puerto Rico. April 4, 2024.

viii. **McConnell, T. J.** (2024). *Shifting Toward Digital Storytelling to Engage and Teach STEM Learners*. Presentation at the 2024 HASTI-ICTM Conference, Indianapolis, IN., February 20, 2024.

ix. **McConnell, T. J.**, Foster, T., & Kolar, M. (2024). *Conservation Educator Academy at the Indianapolis Zoo: A University-Zoo-School Partnership to Strengthen Teacher Education for Conservation and Sustainable Development.* Poster presentation at the 12th World Environmental Education Congress, Abu Dhabi, UAE, January 29-February 2, 2024.

x. **McConnell, T. J.**, & Giorgio-Booher, B. (2024). *Conservation Tales: A Collaborative Model for Developing Print and Digital Environmental Education Teaching Resources to Engage Children in STEM and Sustainable Development Goals.* Presentation at the 12th World Environmental Education Congress, Abu Dhabi, UAE, January 29-February 2, 2024.

xi. **McConnell, T.J.** (2023). *Bringing Digital Storytelling into the STEM Classroom: Shifting pedagogy to meet new ways of accessing and creating content*. Keynote address at the 4th STEM Educational International Conference (Virtual), Masinde Muliro University of Science & Technology, Kakamega, Kenya. November 17, 2023.

xii. Giorgio-Booher, B., & **McConnell, T. J.** (2023). Conservation Tales: Cultivating Transdisciplinary Collaborations to Create Science Education Materials. Presentation at the Engaged Scholarship Consortium International Conference: Mobilizing Change through Engaged Scholarship. East Lansing, MI, October 5, 2023.

xiii. Baker, R., Clone, A., Sherer, Z, Giorgio-Booher, B., **McConnell, T.J.** (2023). Conservation Tales: Exploring Coral Reef Restoration. Poster presentation at the Engaged Scholarship Consortium International Conference: Mobilizing Change through Engaged Scholarship. East Lansing, MI, October 4, 2023.

xiv. **McConnell, T. J.** (2023*). Collaborative Teams for Self-Publication: A model for creating locally-relevant educational books for children*. Presentation at the 2nd World Conference on Transformative Education, University of Cape Coast, Ghana, May 19, 2023

xv. Giorgio-Booher, B. & **McConnell, T. J.** (2022). *Collaboration between Art and Science in the Development of a Children's Book Series*. Presentation at the Mid-America College Art Association Virtual Conference, April 1, 2022.

xvi. Owens, A. M., & **McConnell, T. J.** (2022). *Butterfly Bonanza: Using the Royal Butterfly Family Card Matching Game to teach life cycles*. Presentation at the Annual Conference of the Hoosier Association of Science Teachers, Inc. Indianapolis, Indiana. February 15, 2022.

xvii. **McConnell, T. J.** & Foster, T. (2022). *Facing climate Change Down Under: The 2022 Conservation Educator Academy.* Presentation at the Annual Conference of the Hoosier Association of Science Teachers, Inc. Indianapolis, Indiana. February 14, 2022.

xviii. **McConnell, T. J.** (2021). *Building Inclusive and Gender Responsive STEM Education Programs: Models, Strategies and Challenges*. Keynote address at Science, Technology, Engineering and Mathematics Education During and Post COVID'19 International Conference 2021 (STEMEIC2021), hosted virtually by Masinde Muliro University of Science & Technology, Kakamega, Kenya. November 18, 2021.

xix. **McConnell, T. J.,** & Giorgio-Booher, B. (2021). *Let's Inquire About Wildlife: Integrating science and literacy using the Conservation Tales books*. Presentation at the HASTI Virtual Conference, Hoosier Association of Science Teachers, Inc. February 7, 2021.

xx. **McConnell. T. J.** (2020). *Building Sustainable and Authentic STEM Learning Opportunities for a Socially Distanced World – Challenges and Opportunities.* Keynote address at Science, Technology, Engineering and Mathematics (STEM) Education During and Post COVID'19 International Conference 2020, hosted virtually by Sam Houston State University, the Diversity Education Institute, (Conroe, Texas), and Masinde Muliro University of Science & Technology, Kakamega, Kenya. October 13-15, 2020.

xxi. **McConnell, T. J.,** & Forestater, E. (2020). *Telemetry for Outdoor Education: Infusing inquiry practices into learning activities.* Presentation at the Environmental Education Association of Indiana virtual conference, November 7, 2020.

xxii. **McConnell, T. J.** (2020). *eLearning for Inquiry-Based Science: Conservation Tales eLearning Corner.* Presentation at the first HASTI Virtual Conference, Hoosier Association of Science Teachers, Inc. July 9, 2020.

xxiii. **McConnell, T. J.** (2020, May). *A Twinkling for Sea Turtles: A tale of moonlight, starlight and sea turtles.* Invited presentation in the #YourUniverse virtual lecture series, Charles W. Brown Planetarium, Ball State University, May 15, 2020. (live-streamed public presentation via FaceBook Live)

xxiv. **McConnell, T. J.** (2020, February). *iNaturalist: Your students as citizen scientists.* Presentation at the Annual Conference of the Hoosier Association of Science Teachers, Inc*,* Indianapolis, IN. February 11, 2020.

xxv. **McConnell, T. J**., & Giorgio-Booher, B. (2020, February). *Bats and bees and manatees: Bring authentic science processes, inquiry activities and conservation to your classroom with Conservation Tales.* Presentation at the Annual Conference of the Hoosier Association of Science Teachers, Inc*,* Indianapolis, IN. February 11, 2020.

xxvi. **McConnell, T. J.** (2019, November). *"Inquirizing" Environmental Education Programs: Highlighting the Natural Ties Between EE and Inquiry.* Invited presentation at the 2019 Conference of the Environmental Education Association of Indiana. McCormick's Creek State Park, Spencer, IN, November 2, 2019.

xxvii. **McConnell, T. J.** (2019, October). *Conservation Tales Gulf Coast Series – Integrating Inquiry, Literacy and Wildlife Conservation for young readers.* Presentation to be at the 2019 Annual Conference of the Florida Association of Science Teachers, St. Augustine, FL, October 26, 2019.

xxviii. **McConnell, T. J.,** Parker, J. M., & Eberhardt, J. (2019, April). *NSTA Press Session: Problem-Based Learning in the Science Classroom, K-12.* Presentation at the 2019 National Conference of the National Science Teachers Association, St. Louis, MO, April 12, 2019.

xxix. **McConnell, T. J.** & Giorgio-Booher, B. (2019, February). *Conservation Tales – Integrating environmental education, art and literacy for children.* Presentation at the 2019 Hoosier Association of Science Teachers, Inc. Conference, Indianapolis, IN, February 18, 2019.

xxx. **McConnell, T. J.,** Mbogori, T., Mucherah, W., Ndemanu, M. (2018, October). *Re-imagining Education in the African Context.* Panel discussion at the Global Connections Conference, Ball State University, Muncie, IN, October 10, 2018.

xxxi. Giorgio-Booher, B, & **McConnell, T.J.** (2018). *Conservation Tales: Children's books about wildlife conservation,* in *Biologic Ecologic* special session. Presentation at the SouthEast College Art Conference (SECAC), Birmingham, AL, October 18, 2018.

xxxii. **McConnell, T. J.** (2018). *Communicating Science to a Non-Scientific Public: Working with educators, authors and visual artists to bring scientific research to a lay audience.* Invited presentation in the Department of Biology Fall Seminar Series, Ball State University, Muncie, IN, October 12, 2018.

xxxiii. Giorgio-Booher, B, & **McConnell, T.J**. (2018). *Collaboration between arts and science: Educating children about wildlife conservation.* Paper presented at the 2018 Mid-American College Art Association Conference, Lincoln, NE, Oct. 4, 2018.

xxxiv. **McConnell, T.J.** (2018). *Problem-based learning for responsive and transformative teacher professional development.* Presentation at the World Conference on Transformative Education, Masinde Muliro University of Science & Technology, Kakamega, Kenya, July 28, 2018.

xxxv. **McConnell, T.J**. (2018). *Developing problem-based learning science lessons for local contexts.* Presentation at the BSU Plenary Session at the World Conference on Transformative Education, Masinde Muliro University of Science & Technology, Kakamega, Kenya, July 26, 2018.

xxxvi. **McConnell, T. J**. & Giorgio-Booher B. (2018). *Conservation Tales: Integrating STEM, Literacy and the Arts with Environmental Education*. Presentation at the 2018 nErDCamp Indy, Indianapolis, IN, July 19, 2018.

xxxvii. **McConnell, T. J.** & Giorgio-Booher, B. (2017). *Conservation Tales: Developing illustrations for a science education book for children.* Presentation at Final Friday at the David Ousley Museum of Art. Ball State University. October 27, 2017.

xxxviii. **McConnell, T.J**., Giorgio-Booher, B., Islam, K., Pfaff, S., Delancey, C., MacDonald, G., Hensley, S., & Gabrek, B. (2017). *Conservation Tales: Environmental education with diverse characters for young readers.* Presentation at the 2017 Conference of the Environmental Education Association of Indiana, Morgantown, IN, October 14, 2017.

xxxix. **McConnell, T. J**., & Giorgio-Booher, B. (2017). *Conservation Tales: Environmental education with diverse characters for young readers.* Presentation at nErdCamp Indy, Avon, IN. July 20, 2017.

xl. **McConnell, T. J.,** Parker, J. M., & Eberhardt, J. (2017). *NSTA Press Session: Problem-Based Learning in the Science Classroom.* Invited presentation at the 2017 National Conference of the National Science Teachers Association, Los Angeles, CA, April 2, 2017.

xli. **McConnell, T. J.** (2017). *Solar Motion Demonstrator for Earth and Space Science Problem-Based Learning.* Presentation at the 2017 National Conference of the National Science Teachers Association, Los Angeles, CA, March 31, 2017.

xlii. Foster, T., Schilten, M., & **McConnell, T.J.** (2016). *Focus on Forests.* Workshop at the Hoosier Association of Science Teachers, Inc. for the 2016 Annual Conference, Indianapolis, IN, February 3, 2016.

xliii. **McConnell, T. J.,** Desouza, J. M., Foster, T., & Schilten, M. (2015) *Conservation Educator Academy at the International Orangutan Center: Developing inquiry practices for K-12 classrooms.* Presentation at the 2015 Annual International Conference of the National Association for Research in Science Teaching. Chicago, IL, April 11, 2015.

xliv. **McConnell, T. J.,** Bonifield, C., Bryan, J., Burden, D., Baird, N., Johnson, S., & Stump, S. (2015). *Engineering STEM Success – Lessons in Project-Based Learning and Math-Science Integration.* Presentation at the 2015 Conference of the Hoosier Association of Science Teachers, Inc., Indianapolis, IN, February 13, 2015.

xlv. **McConnell, T. J.** (2015). *Helping visually impaired students get in touch with science concepts.* Presentation at the 2015 Conference of the Hoosier Association of Science Teachers, Inc., Indianapolis, IN, February 13, 2015.

xlvi. Bryan, J., & **McConnell, T. J.** (2015). *We have iPads! Now what do we do with them?* Presentation at the 2015 Conference of the Hoosier Association of Science Teachers, Inc., Indianapolis, IN, February 12, 2015.

xlvii. Aurah, C. M., & **McConnell, T. J.** (2013). *Metacognitive prompts to boost student problem-solving skills.* Presentation at the Annual Conference of the Hoosier Association of Science Teachers, Inc., Indianapolis, IN, Feb. 8, 2013.

xlviii. **McConnell, T. J.** (2013). *Rethinking the preparation of science teachers: The Woodrow Wilson Indiana Teaching Fellowships at Ball State University.* Presentation at the Annual Conference of the Hoosier Association of Science Teachers, Inc., Indianapolis, IN, Feb. 8, 2013.

xlix. **McConnell, T. J.** (2012). *Soaking in Inquiry! Inquiry-based osmosis labs for the biology classroom.* Workshop presented at the National Science Teachers Association National Conference, Indianapolis, IN, April 1, 2012.

l. **McConnell, T. J**., Snow, C., Anderson, S. R., Pappas, M., Makowski, S. (2012). *Woodrow Wilson Fellows – How teacher inquiry shapes understandings.* Symposium at the National Science Teachers Association Conference, Indianapolis, IN, March 31, 2012.

li. **McConnell, T. J**., Parker, J. M., Eberhardt, J. (2012). *Case studies in teacher content learning in a problem-based learning professional development setting*. Presentation at the Annual Meeting of the National Association of Research in Science Teaching, Indianapolis, IN, March 25-28, 2012.

lii. Johnson, S. M., **McConnell, T. J**., & Stump, S. L. (2012). *Rethinking the preparation of science and mathematics teachers – The Woodrow Wilson Teaching Fellows Program at Ball State University.* Presentation at the Annual Conference of the Indiana Academy of Sciences, West Lafayette, IN, March 10, 2012.

liii. **McConnell, T. J.,** Parker, J. M., Eberhardt, J., Koehler, M. J., and Lundeberg, M. A. (2010). *Virtual professional learning communities: Video-conferencing as a tool to facilitate teacher learning.* Presentation at the Annual Meeting of the National Association of Research in Science Teaching, Philadelphia, PA, March 20-24, 2010.

liv. **McConnell, T. J.,** Parker, J. M., Eberhardt, J., Stanaway, J. C., Urban-Lurain, M., & Koehler, M. J. (2009, April). *Gauging changes in teachers' science content knowledge: Can problem-based professional development lead to deeper understanding of science?* Presentation at the National Association of Research in Science Teaching Annual Conference, Garden Grove, CA, April 18, 2009.

lv. Zhang, M., Lundeberg, M., **McConnell, T. J.,** Koehler, M. J., & Eberhardt, J., (2009, April) *Windows into teachers' science ideas: Assessing the development of teachers' science content knowledge.* Presentation at the annual meeting of the American Educational Research Association, San Diego, CA, April 15, 2009.

lvi. **McConnell, T. J.,** Parker, J. M., Eberhardt, J., Stanaway, J. C., Heidemann, M., Rice, J., Jacobowitz, R., Zweering, Z., Marschal, C., & Urban-Lurain, M. (2009, January). *Assessing changes in teachers' content knowledge: The impact of problem-based learning as professional development.* Presentation at the Association of Science Teacher Education Annual International Conference, Hartford, CT, Jan 9, 2009.

lvii. **McConnell, T. J.,** Zhang, T., Zhang, M., Lundeberg, M. A., & Eberhardt, J. (2008, March). *"I'm invested in the outcome": Professional development that matters in the eyes of teachers.* Presentation at the National Association for Research in Science Teaching 2008 Annual International Conference, Baltimore, MD, April 2, 2008.

lviii. **McConnell, T. J.,** Lundeberg, M. A., Koehler, M. J., Urban-Lurain, M., Zhang, T., Mikeska, J., Parker, J., Zhang, M., & Eberhardt, J. (2008, January). *Video-based teacher reflection – What is the real effect on reflections of inservice teachers?* Presentation at the Association for Science Teacher Education, St. Louis, MO, January 12, 2008.

lix. **McConnell, T. J.,** Stanaway, J. C., Parker, J. M., & Eberhardt, J., Lundeberg, M. A, & Koehler, M. J. (2008, January). *Influencing pedagogical content knowledge of inservice science teachers through problem-based learning.* Presentation at the Association for Science Teacher Education, St. Louis, MO, January 11, 2008.

lx. Zhang, T., **McConnell, T. J.,** Lundeberg, M. A., Koehler, M. J., Stanaway, J., Zhang, M., Urban-Lurain, M., Eberhardt, J, & Parker, J. (2008, January). *If you build it, why will they come back? Motivation of teachers to re-enroll in a professional development project.* Presentation at the Association for Science Teacher Education 2008 International Conference, St. Louis, MO, January 10, 2008.

lxi. **McConnell T. J.** (2007, April). *Making it explicit: The impact of collaborative reflection on preservice elementary teachers understanding of technology integration in the science classroom.* Presentation at the Annual Meeting of the National Association of Research in Science Teaching, New Orleans, LA.

lxii. Capobianco, B.M., **McConnell, T.,** Schellenberger, L., & Priddy, M. (2007, April). *Preparing the stewards of the discipline through collaborative action research.* Presentation at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.

lxiii. **McConnell, T. J.** (2007, January). *Facilitating the development of technology integration skills among preservice elementary science teachers.* Presentation at the Annual Meeting of the Association of Science Teacher Educators, Clearwater Beach, FL.

lxiv. **McConnell, T. J.** (2006, April). *Using collaborative reflection to build technology integration skills among pre-service elementary science teachers.* Poster presented at the Annual Meeting of the National Association of Research in Science Teaching, San Francisco, CA. April, 2006.

lxv. Llerandi-Roman, P. A., Wee, B., **McConnell, T. J.,** Waterson, R. A., & Rapoport, A. (2006, March). *Integrating science and social studies into pre-service teacher education programs: A lesson from Katrina.* Presentation at the Annual Meeting of the Association of American Geographers, Chicago, IL. March 6, 2006.

lxvi. **McConnell, T. J.** (2006, January). *Defining the role of technology: Perceptions of pre-service elementary science teachers.* Presentation at Annual Meeting of the Association of Science Teacher Educators, Portland, OR.

lxvii. **McConnell, T. J.** & Capobianco, B. M. (2006, January). *Collaborative reflection on preservice science teachers' use of technology: An action research study.* Presentation at Annual Meeting of the Association of Science Teacher Educators, Portland, OR.

lxviii. **McConnell, T. J.** (2005, February). *Building Technology Integration Skills in Preservice Teachers Through Collaborative Reflection.* Presentation at the Annual Teaching and Learning Technologies Conference, West Lafayette, IN.

lxix. Capobianco, B. M. & **McConnell, T. J.** (2004, January) *Teaching and learning about the role of technology in the elementary science classroom: A self-study approach.* Presentation at the Annual Meeting of the Association for Educators of Teachers of Science, Nashville, TN.

TECHNOLOGY SKILL SET

Proficient in using:

MS Office – Word, Excel, PowerPoint
Adobe Creative Cloud Suite – Acrobat Pro, Photoshop, InDesign, Illustrator
Webpage Creation and Management – WordPress, Weebly/Square, Dreamweaver
Videoconferencing – Zoom, Teams, GoToMeeting

Developing proficiency with:

Video Editing – iMovie, Adobe Premier Pro
Social Media Production – Adobe Express

OFFICES HELD

Hoosier Association of Science Teachers, Inc (HASTI) Board of Directors.
District 6 Director. July 1, 2012 – 2014
Vice President, June 2014-May 2015
President, May 2015-May 2016
Conference Chair, May 2016-May 2017.

Ball State Chapter of Sigma Xi
Membership Officer, April 2010 – April 2011

Science Education Strand, Indiana Academy of Sciences
Strand Vice-Chair, Oct. 2009-Oct. 2010.

National Association for Research in Science Teaching
Strand 9 Coordinator – March 19, 2009 through present.
Strand 9 Co-Coordinator – April 7, 2008 through March 19, 2009.

East Central Indiana Regional Science Fair planning committee.
Chair, March 1, 2012 – 2016
Co-Chair, March 1. 2011- March 1, 2012
Member, Oct. 2009- Feb. 2011.

CURRENT PROFESSIONAL MEMBERSHIPS

National Association of Science Teaching
Hoosier Association of Science Teachers

EDITORIAL SERVICE

Managing Editor, *The Hoosier Science Teacher.* February 2022 – present.
https://scholarworks.iu.edu/journals/index.php/thst/index
Managing Editor, *Global Journal of Transformative Education*. October 2018 to present.
https://scholarworks.iu.edu/journals/index.php/gjte/index

EDITORIAL REVIEW PANELS

Journal of Curriculum and Instruction. (2008-Present)
Journal of Science Teacher Education. (2009-Present)
International Journal of Environmental and Science Education. (2010-Present)
Journal of Science and Technology Education. (2011- Present)
Proceedings of the Indiana Academy of Sciences (2018-Present)

Presentation Proposal Assessor

World Conference on Transformative Education (WCTE Conferences) – (2023-2025)
National Association for Research in Science Teaching's Annual International Conference (2007-2016)
Association of Science Teacher Educator's International Conference (2009-2010)
National Science Teachers Association Annual Conference, 2012.
Hoosier Association of Science Teachers, Inc, Annual Conference 2013-2016.

Biology Textbook Chapter Review

Phelan, Jay, (in press). Evolution and Natural Selection. In *What is Life? A Guide to Biology.* New York: W.H. Freeman and Company. 2008 and 2011.