

Jody Bintz
BSCS Science Learning
5415 Mark Dabbling Blvd, Colorado Springs, CO 80918
jbintz@bscs.org; 712-310-7460

Professional Preparation

University of Northern Iowa	Science Education	M.A, 1994
University of Northern Iowa	Biology	B.A., 1983

Professional Experience

2022 - present	Associate Director for Strategic Partnerships Director, Educator Learning, BSCS Science Learning, Colorado Springs, CO
2018 – 2022	Associate Director for Strategic Partnerships and Professional Learning, BSCS Science Learning, Colorado Springs, CO
2014 – 2018	Director, Professional Learning, BSCS, Colorado Springs, CO
2013 – 2014	Senior Science Educator, BSCS, Colorado Springs, CO
2004 - 2013	Science Educator, BSCS, Colorado Springs
2003 – 2004	School Improvement Consultant, Loess Hills Area Education Agency 13, Council Bluffs, IA
1998 – 2003	Science Consultant, Loess Hills Area Education Agency 13, Council Bluffs, IA
1985 – 1998	High School Science Teacher, Treynor Community Schools, Treynor, IA

Funded Research/Development Grants

Testing a Leadership Development Model for High School Science Reform and the Relationship of Key Variables to Student Achievement: Award number: NSF DRL 1316202, Award: \$449,817, Dates 2013-2015. PI: Bintz. This study analyzed the effects of an intensive, three-year PD program, the BSCS National Academy for Curriculum Leadership (NACL) (NSF Award No. ESI-9911615), on students' science achievement. The goal of the NACL is to develop the capacity of leadership teams composed of high school science teachers and administrators to improve their high school programs.

Developing Consensus Guidelines for Tools and Processes that Assess Science Instructional Materials. Award Number: NSF DGE 14436745. Award: \$298,696. Dates: 2014-2017. Co-PI: Bintz. BSCS responded to the call from the National Research Council to measure the adoption of K-12 instructional materials by developing a framework of criteria by which to assess the quality of instructional materials as well as characteristics of tools and processes that can be applied reliably to commonly used instructional materials.

BSCS/NABT AP Biology Leadership Development Program. Award: Howard Hughes Medical Institute. Award: \$1,300,000. Dates: 2014-2018. PI: Bintz. This project involved the development of nearly 100 AP biology teacher leaders through three cohorts and intensive work with nearly 35

selected teacher leaders who worked regionally to provide week-long regional teacher academies. A partner in this work included the National Association of Biology Teachers.

Developing Math/Science Teacher Leadership: A Consensus Approach to Evaluating Program Quality. Award number: NSF ECR 1534698. Award: \$299,994. Dates: 2015-2017. PI: Bintz. This research project synthesized the research and literature focused on mathematics and science teacher leadership development programs. Partners in this project included Educational Development Center, Knowles Teacher Initiative, and Horizon Research, Inc.

Science Teachers Learning from Lesson Analysis (STeLLA): High School Biology. Award number: #1503280. Award: \$3,284,536 (with supplement). Dates: 2015-2020. PI: Wilson, Co-PI: Bintz. This research and development project is taking the STeLLA professional development program that has been shown to be effective with elementary teachers, to the high school level. A quasi-experiment design involving 32 teachers examined impacts on teacher content knowledge and PCK, teacher practice, and ultimately student content knowledge. The supplement focuses on the development of district-based leadership capacity to expand the program.

Advancing Tools and Processes for Next Generation Science. Award: Carnegie Corporation of New York. Award: \$2,000,000. Dates: 2016-2019. PI: Bintz. This project involved the design, field-test, revision, and dissemination of a suite of tools and processes for leaders to use through extended professional learning experiences with teachers to plan for translating the *Next Generation Science Standards* into instruction and classroom assessment ([Five Tools & Processes](#)) and to support the collaborative evaluation, selection, and implementation of high-quality instructional materials designed for next generation science ([NextGen TIME](#)). Partners in these efforts include the American Museum of Natural History, the K-12 Alliance at WestEd, Achieve, Inc., and Learning Innovations at WestEd.

NEXUS Academy for Science Curriculum Leadership. Award: Carnegie Corporation of New York. Award: \$3,000,000 total to WestEd with \$1,300,000 to BSCS. Dates: 2019-2024. PI: Bintz. This project involved the development of state and district leadership teams from Massachusetts, Oklahoma, New Mexico, and Washington over three years to support local implementation of the OpenSciEd Middle School Program. WestEd is a partner in this work.

STeLLA featuring OpenSciEd Middle School Program. Award: \$1,700,000. Dates: 2019-2024. PI: Bintz. This project involved supporting middle school science teachers from Jefferson County Public Schools, Louisville, KY through the implementation of the OpenSciEd middle school program over three years.

Synergistic Activities

Customized District Professional Learning: Design and lead a variety of professional development programs to improve science programs and enhance the pedagogical content knowledge of K-12 science teachers across the country. Efforts include a variety of PD strategies and involve work with teams of PD leaders or district leaders to improve the coherence of their K-12 science program, select and implement or revise and implement instructional materials, and improve teachers' abilities to improve their classroom practice and student learning. Recent work includes a heavy emphasis on the Next Generation Science Standards (NGSS).

PD Program Evaluation: Lead work to conduct formative and summative evaluation of long-term professional development and leadership development programs using surveys, observations, and document analysis.

Leadership Development: Design and lead a variety of leadership development programs to build leadership capacity and enhance the knowledge and skills of professional development providers in various sites across the country. Work includes leadership academies for AP Biology teacher leaders, leadership institutes and coaching for STEM-focused leadership teams, STeLLA-focused leadership development programs, and institutes for professional development providers for the NGSS and for specific PD programs.

Publications

Bintz, J. (2009). How to select programs for your inquiry classroom. In *The biology's teacher handbook* (4th Ed.). Arlington, VA: NSTA Press.

Bintz, J. (2004). Teaching reading in science. In R. Billmeyer (Ed.), *Strategic reading the content areas: Practical applications for creating a thinking environment* (pp. 175-184). Omaha, NE: Rachel and Associates.

Bintz, J., & Landes, L. (2008). Building leadership teams to create professional learning communities in secondary schools. In J. Gess-Newsome, J. Luft, & R. Bell (Eds.), *Reforming secondary science education*. Arlington, VA: NSTA press.

Bintz, J., & Landes, N. (2009). *Making sense of multidisciplinary science*. Dubuque, IA: Kendall Hunt Publishing Company.

Bintz, J., Mohan, L., Miller, B., Mohan, A., Galosy, J., & Stuhlastz, M. (2017). *Developing math/science teacher leadership: Symposium Proceedings* (Research Report No. 2017- 04). Colorado Springs, CO: BSCS.

Galosy, J., Mohan, L., Mohan, A., Miller, B., & Bintz, J. (2017). *Math and science teacher leadership development: Findings from research and program reviews* (Research Report No. 2017-03). Colorado Springs, CO: BSCS.

Hand, B., Akkus, R, Wise, K., & Bintz, J. (2004). *Science writing heuristic (SWH) project: integrating research and professional development using the SWH: A grade six case study of students' cognitive involvement and attitudes towards scientific inquiry using the SWH*. Paper presented at the annual meeting of AETS, Nashville, TN.

Hand, B., Norton-Meier, L, Staker, J., & Bintz, J. (2009). *Negotiating science: The critical role of argument in student inquiry, grades 5-10*. Portsmouth, NH: Heinemann.

McConachie, S., Hall, M., Resnick, L., Ravi, A., Bill, V., Bintz, J., & Taylor, J. (2006). Task, text, and talk: Literacy for all subjects. *Educational Leadership*, 64(2), 8–14.

Mohan, L., Galosy, J., Miller, B., & Bintz, J. (2017). *A synthesis of math/science teacher leadership development programs: Consensus findings and recommendations* (Research Report No. 2017-02). Colorado Springs, CO: BSCS.

Roth, K.J., Bintz, J., Wickler, N.W., Hvidsten, C., Taylor, J., Beardsley, P.M., Caine, J.A., & Wilson, C.D. (2017) *Design principles for effective video-based professional development. International Journal of STEM Education.*

Spiegel, S., Bintz, J., Taylor, J., Landes, L., & Jordan, D. (2009). Science. In S. McConachie & T. Petrosky (Eds.), *Content matters*. San Francisco: Jossey-Bass.

Taylor, J.A., Stuhlsatz, M.A.M., & Bintz, J. (2019). *The effect of a leadership development program for high school science reform on student achievement in science: A retrospective quasi-experiment*. Science Educator, Vol. 27, No. 1.

Affiliations

National Association for Research in Science Teaching (NARST)

National Science Education Leadership Association (NSELA)

National Science Teaching Association (NSTA)

Council of State Science Supervisors (CSSS)

Learning Forward