

Beth Murphy, PhD
BethMurphyConsulting.com
bethmurphyconsulting@gmail.com
612-270-0194

SCIENCE & STEM EDUCATION CONSULTANT

- Collaborative leader and systems thinker, fostering partnership between individuals and organizations to achieve shared goals
- Experienced professional development designer and provider for K-12, informal, and after-school educators
- Empowering program evaluator who builds capacity and creates learning communities that inspire educators to do their best work
- Knowledgeable in best practices and research in science/STEM teaching and learning for in-school and out-of-school environments

Capabilities include:

- Outcomes-based project design & management
- Professional development design & facilitation
- Program evaluation & data visualization
- Professional writing, reporting & presenting
- Educator coaching & learning communities
- Collaboration building & leadership

EXPERIENCE

Beth Murphy Consulting, LLC

2014–Present

Independent consultancy providing program/project management for organizations and collaborations, including designing and facilitating professional development and program evaluation. Examples of long-term clients and projects include:

- National Science Teaching Association, Field Editor for Connected Science Learning, October 2018–present
- Minnesota Independent School Forum, STEM Program Manager, January 2017–present
- Science from Scientists, program evaluation & professional development consultant, July 2019–present
- STARBASE Minnesota, STEM Pathways project director, February 2014–January 2017

The Bakken Museum

1999–2016

Duties included education program/project management including grant writing and reporting, budget management, supervision/coordination of project staff and consultants, project evaluation.

- Director of Special Projects 2005–2016
Led long-standing partnership with the Minneapolis Public Schools including grant-funded K-12 teacher professional development programs, a district-wide outreach program for schools, and the teacher in residence program. Designed and directed the Bakken Teacher Academy.
- Curator of Education, Director of Education & Exhibits 1999–2005
Managed all aspects of The Bakken's educational, volunteer and public programs including supervision of staff, program planning and implementation, grant writing, program evaluation, and communications.

Faculty Appointments

1993–2018

Adjunct Assistant Professor, Hamline University–St. Paul, MN 1998–99, 2011–2018
1998–99 (physics), 2011–2018 (science education)

Assistant Professor of Physics, Carthage College–Kenosha, WI 1994–1998
*Tenure-track position, teaching courses for physics majors and non-majors
Chair, Physics Department (1996–98) & Chair, Curriculum Planning Committee (1997–98)*

Visiting Assistant Professor of Physics, Gustavus Adolphus College–St. Peter, MN 1993–1994

EDUCATION

University of Rochester–Rochester, NY
University of Rochester–Rochester, NY
Colby College–Waterville, ME

PhD: Physics, 1993
MA: Physics, 1990
BA: Physics with minor in Applied Mathematics, 1988

ADDITIONAL ACTIVITIES

Board of Directors & Advisory Positions

Science from Scientists, 2018–present

Chair, Research & Evaluation Subcommittee, 2020–present

SciMathMN, 2002–2011 & 2018–present

Chair, STEM Network Leadership Committee, 2018–present

Executive Committee, 2018–present

Board of Directors, Laura Jeffrey Academy, St. Paul, MN, 2011–2016

Tuition-free charter school offering a unique STEM-focused, girl-focused educational experience, grades 5–8

Advisor, K-12 STEM strategic planning workgroup, Minneapolis Public Schools, 2009–2014

Member, Lake Harriet Community School site council, Minneapolis Public Schools, MN, 2007–2010

Parent/community representative, worked with School Improvement Plan team and STEM subcommittee

Professional Development

Stephanie Evergreen Data Visualization Academy, completed 2018

Certified “Dimensions of Success” Observer, 2018–present

Authorized user of research-based observation, reporting and coaching protocol designed for program planning, evaluation and improvement of STEM learning experiences, developed by the PEAR Institute

Participant, James P. Shannon Leadership Institute, Wilder Foundation, 2014–2015

External Reviewer

Reviewed submissions for *Connected Science Learning*, an online NSTA journal that highlights STEM education experiences that bridge the gap between in-school and out-of-school settings. 2017–2018

Reviewed STEM education grant proposals for Math & Science Partnership Program, National Science Foundation and Minnesota Office of Higher Education

RECENT PUBLICATIONS

Murphy, Beth. (2019–present) Various editorials, *Connected Science Learning*. 1 (9) to present.

bethmurphyconsulting.com/category/connected-science-learning/

Murphy, Beth. (2019). Partnering with Education, *ASTC Dimensions: Bimonthly Journal of the Association of Science-Technology Centers*, November/December.

bethmurphyconsulting.com/wp-content/uploads/2020/01/2019_Nov-Dec-Dimension_Murphy.pdf

Murphy, Beth, Melissa Hedwall, Andrew Dirks, and Elizabeth Stretch. (2017). Short-Form Science: A Close-Reading Unit on the History of the Atom. *The Science Teacher*. 84 (1).

Moore, Abby, Beth Murphy, Melanie Peters, and Steven Walvig. (2016). STEM Pathways: Building a STEM Learning Ecosystem. *Connected Science Learning*. 1 (1).

www.nsta.org/connected-science-learning/connected-science-learning-issue-1/stem-pathways

Washburn, Julia and Beth Murphy. (2010). “Ensuring Program Relevance through Collaboration and Evaluation.” In *Building Museum and School Partnerships*, Second Edition, ed. Kim Fortney. Washington DC: American Association of Museums: 73-80.

Murphy, Beth and Kelly Finnerty. (2010). Building Science Assets, *ASTC Dimensions: Bimonthly Journal of the Association of Science-Technology Centers*, July/August.

Additional publications, presentations, and professional references available upon request