

## **Christine Hall Brothers Bio**

Christine Hall Brothers currently serves as the math department lead, grade 9 lead, and 9th grade math teacher at Boston Green Academy. A Nationally Board Certified Teacher, Ms. Hall Brothers previously taught high school math and entrepreneurship at Excel High School, Boston Public Schools. Ms. Hall Brothers moved on to serve as the city wide Director of Secondary Mathematics, before taking on the role of Director of Mathematics, K-12 for Boston Public Schools. While in central office, she was responsible for transitioning the district to the Common Core State Standards, overseeing curriculum transitions as well as professional development for both leadership and teachers. Her experiences also include math instructor for North Carolina Virtual Public Schools and adjunct teaching at Cambridge College. After several years in administration and consulting, Ms. Hall Brothers chose to return to the classroom at BGA. When she's not teaching, she investigates and practices continuous improvement systems and their application to education, specifically around areas of technology and student engagement. Outside of the classroom, she enjoys fitness, cooking, and anything that lets her spend time with her family. She holds a BS in Secondary Education / Math from the University of Scranton and an MEd in Curriculum and Instruction from Boston College.

The climate crisis is something that I have learned about more intently in my time at BGA. School wide PD has highlighted macro issues around topics such as carbon emissions and alternative fuels and micro moves close to home, such as composting, recycling, growing our own plants and eating a more vegetarian diet. While I've done a lot of topical learning, none has ever gone deep enough for me to feel ready to create units of study or to have enough data that I've worked with and understand well enough to wrap into more routine daily work such as do nows and tasks.

The climate crisis is something we live with, especially if we are paying attention. I've lived in Boston since 2001. We used to have cold, snowy winters. Now it's wet and rainy; last year we didn't even get to take our children sledding! We are lovers of water. My husband, a sailing instructor, can expound for days on the negative impact of motorized water apparatus, from boats to fuel sucking jet skis. We've seen more fires in our neighborhood, and as renters of a 3rd floor apartment, have had many recent summers where our window unit air conditioners can't keep up with the heat. Indeed, I re-wrote this proposal in the 11th hour, as my original plan was to work in Monterey Bay and environs, but I am now concerned that the CA fires and predictable housing and air crisis that will follow will make that investigation too challenging in Summer 2025.

In my own life, I work to address the climate crisis by teaching both my children and students about stewardship - caring for nature and what we've been given. I teach math and seek to empower students to see themselves as developers, not consumers, innovators, not acceptors of something just because it seems to be the only choice. I've taken students on tours of waterways, sustainable fish suppliers, and sustainable restaurants to see positive experiences of industry leading the charge for good. We've gone rowing to both enjoy the water while assessing the impact of pollution. Through the grant, I hope to go deeper and explore impact and innovation in the areas of geothermal engineering and climate study.