

Remixing Space to Foster Learning and Creativity

Dean Phillips, M.Ed.

Dean Phillips grew up attending public school in Montana. He spent 15 years teaching middle school where he gained powerful experiences that continue to influence his work and conversations with educators. He is a K-12 Montana educator and has a Master's Degree in Education with an emphasis in emerging technologies and technology integration. Dean has served as the technology integration specialist for Region IV in Montana, and in 2012 he was selected as a member of the Google Certified Teacher Academy, becoming one of the first Google certified teachers in the state of Montana. Since then he has worked with many schools and districts in Montana, Oregon, Colorado, and New York. Dean currently works for Beyond The Chalk, a company he co-founded with the vision of providing learning opportunities and support for teachers and schools looking to leverage technology to enhance their practices. He has a strong passion for helping teachers and learners become successful with educational uses and application of technology.

Jeff Crews, Ed.D.

Jeff Crews, co-founder of Beyond the Chalk and owner of SpatialSci, has over 14 years k-12 teaching experience as a science educator, technology coordinator, and director of technology in Montana schools. Jeff spent the first nine years of his teaching career in middle school science, working to develop inquiry-based science into his teaching practice through many outdoor education projects. He has served as a district technology coordinator, Instructional Technology Coordinator for The Office of Public Instruction, an adjunct professor for The University of Montana and Lesley University. Jeff also served as Assistant Director of Science and Technology Projects for The Division of Educational Research and Service and as Assistant Director of the NASA Earth Observing System Education Project at The University of Montana. His classroom experiences coupled with his current research interests give him a unique insight into the application of educational technologies into K-12 classroom instruction.



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Welcome

Denise Juneau – MT Superintendent of Public Instruction

Making the Connection with our Kids

Matt Elwell – Bozeman Area Meteorologist

Montana K-12 Students Discovering Viruses to Fight Superbugs

Marisa Pedulla – Montana Tech Professor

STEM in Your Community

Amanda Curtis – Montana State Representative and Butte Math Teacher

Improved Design: Girls in Engineering

Paul Andersen – Bozeman Science Teacher

The Plight of STEM Teaching: Concerns and Dreams

Mike Shaughnessy – Past President NCTM

Gas, Food, Lodging: What You Should Know About the Carbon Cycle

Tony Hartshorn – MSU Professor

Remixing Space to Foster Learning and Creativity

Dean Phillips and Jeff Crews – Co-Founders Beyond the Chalk

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Welcome

Denise Juneau, State Superintendent of Public Instruction

Denise Juneau began her second term as Superintendent of Public Instruction on January 7, 2013. She is the first American Indian woman to serve in a statewide elected office. Denise graduated from Browning High School in Browning, Montana. She earned her Bachelor's Degree in English from Montana State University; her Master's of Education Degree from the Harvard Graduate School of Education; and her Juris Doctorate from the University of Montana. Under Denise's tenure, test scores are up and dropout rates are down. Her initiative, Graduation Matters Montana, has schools and communities working together to implement locally-developed plans to keep more students in school. Additionally, the state has raised standards in English and Math and is providing more opportunity for students to access higher education.

Making the Connection with our Kids

Matt Elwell

Matt Elwell was born in Kansas and graduated from The University of Kansas, but he is no stranger to Montana. Matt and his wife first moved to the Big Sky Country when he landed his first weather gig at the NBC affiliate in Billings in 2002. In December of 2006, Matt took job back in tornado alley at 6NEWS in Lawrence, Kansas. Matt later returned to Montana in 2012 when he joined the KXLF/KBZK weather team as a morning meteorologist. Matt has covered everything from blizzards to devastating tornadoes. Besides being a degreed meteorologist, Matt also holds the coveted Certified Broadcast Meteorologist seal (CBM) from the American Meteorological Society, currently the first and only in the state of Montana. He has three kids ranging from 8 years to 1 year and enjoys teaching his children about what Montana has to offer.

Montana K-12 Students Discovering Viruses to fight Superbugs

Marisa Pedulla , Ph.D.

Marisa received her BS in Chemistry and PhD in Biological Sciences from the University of Pittsburgh. In 2000, she coordinated research at the Pittsburgh Bacteriophage Institute's Genome Center and embarked on an educational experiment in which pre-college students are introduced to viral discovery and characterization. In 2005, she took a position at Montana Tech as Assistant Professor of Biology, where she has since delivered the viral discovery outreach program in K-12 classrooms to over 3500 of Montana's pre-college students. The Howard Hughes Medical Center has adopted bacteriophage discovery into introductory undergraduate biology laboratory courses at over 70 colleges across the nation, including Montana Tech. Dr. Pedulla is currently on Sabbatical and working as a Scientist in Residence at Helena High School. In addition to her academic pursuits, Dr. Pedulla represented the US as an athlete in the 1996 Centennial Olympic Games in Atlanta and coached the 2004 US Olympic team in Athens, Greece. She is an avid outdoors recreationist and lives with her family in Helena, MT.

STEM in Your Community

Amanda Curtis

Amanda Curtis has been teaching math for ten years. In her fifth year at Butte High School, she is collaborating with the Environmental Protection Agency, Department of Environmental Quality, the Clark Fork Watershed Education Program, the history department, and various mining and engineering firms to educate her students about the past, present, and future of mining in Butte. Amanda has a B.S. in biology from Montana Tech and is currently pursuing her M.Ed. in Educational Leadership from the University of Montana. She represents House District 76 (the Butte hill) in the Montana House of Representatives. She lives on the hill with her husband, Kevin, an artist and freelance videographer

Improved Design: Girls in Engineering

Paul Andersen, M.S.

Paul Andersen has been teaching science in Montana for the last twenty years. He spent the first half of his career teaching all the science classes at a small rural school in northern Montana. Paul is currently a science teacher at Bozeman High School where he uses technology and guided inquiry to differentiate instruction for his students. Paul has created hundreds of science videos that have been viewed millions of times by students around the world. Paul was the Montana Teacher of the Year and he was a finalist for National Teacher of the Year. When he is not teaching, Paul enjoys spending time with his family skiing and hiking in the mountains around Bozeman

The Plight of STEM Teaching: Concerns and Dreams

Mike Shaughnessy, Ph.D.

Mike Shaughnessy first became interested in mathematics during his high school years in upstate New York and went on to complete his Ph.D. in mathematics and mathematics education at Michigan State University. Mike was on the faculty of the Mathematics Department at Oregon State University from 1976 to 1993, and then the Department of Mathematics and Statistics at Portland State University from 1993 to 2008, where he also served as the director of the Doctoral Program in Mathematics Education from 1996 to 2008. Mike has taught mathematics content courses and directed professional development experiences for mathematics teachers at all educational levels. He has authored or co-authored over 70 articles, books, and book chapters on issues in teaching and learning in mathematics education. Throughout his career, his principal research interests in mathematics education have been in the teaching and learning of statistics and probability, and geometry. Mike has also served as a member of the Board of Directors of the National Council of Teachers of Mathematics.

Gas, food, lodging: What You Should Know About the Carbon Cycle

Tony Hartshorn, Ph.D.

Tony Hartshorn, PI, has been an Assistant Professor of Soils in MSU's Department of Land Resources and Environmental Sciences since August 2012. He previously was an Assistant Professor in the Department of Geology and Environmental Sciences at James Madison University. He has developed innovative teaching modules through his outreach and teaching, including a dual-enrollment environmental science course for underrepresented juniors and seniors that he co-developed with a Harrisonburg High School (Virginia) colleague in 2011.