Why I want to visit Antarctica this November, and how I plan to bring the skills I learn back to my classroom

Grand Prize Winner

Zach Rome

Lyons Community School, East Williamsburg Brooklyn, NY, 7th and 8th grade Science teacher

ESSAY:

Why I want to visit Antarctica this November, and how I plan to bring the skills I learn back to my classroom.

Almost exactly one year ago, I took a position as a middle school science teacher in innercity Brooklyn. What followed was the most meaningful year of my life.

Of course there are the obvious reasons for wanting to visit Antarctica: the adventure, the natural beauty, the challenge, the bragging rights, the penguins, the whales, etc., etc. I'm afraid, though, that as romantic as it seems there are reasons for venturing to the far reaches of our globe far more pressing than to simply satisfy the ego. I believe Spiderman put it best when he said, "With great power comes great responsibility." It is my duty as a teacher to prove to my students that we can make a change in this world, and I would like to visit Antarctica this November to show them how we can do it.

Antarctica can serve as the world's first great example. With Antarctica, we can show the whole world that through teamwork we can accomplish a common goal. With Antarctica and the impending review of its international protective treaty in 2041 we can show that renewable energy and the preservation of our planet is possible. With Antarctica, we can show that we care.

Mr. Swan queries, How do leaders go the distance? How do they sustain leadership over the course of an arduous, extended expedition? He is right; many people will step forward and offer to lead, but it is the sustainability of leadership that we find overwhelmingly deficient. This, I feel, all boils down to love. What makes a lasting leader is an intrinsic sense of motivation, a motivation not fueled by money, power, or even respect, but through an innate interest and desire to succeed. It then becomes our goal, as I see it, to somehow spark this intrinsic motivation within our youth; for if our youth doesn't love their world, taking care of it will always be an uphill battle. In Antarctica, I will learn the leadership skills necessary to help guide my students towards obtaining this end.

Through collaborative, project-based units focusing on the sustainability and preservation of our environment, I plan to bring the skills from Antarctica back to my classroom. As students uncover the importance and urgency of being conscious citizens, they will find a relevance and engagement in the material that needs no extraneous incentive. Only after this foundation has been laid, can we move forward to create sustainable leaders.

Runners-Up

Katharina Franck *Phone Interview

Belmont High School, Los Angeles, CA, English teacher

ESSAY:

There were penguins and polar bears and therefore the polar bears ate the penguins. It wasn't the only thing my students knew about the new unit we were about to start. It was a unit on survival and my students knew about survival. I am a High school English Teacher in downtown Los Angeles in one of the toughest neighborhoods in the city. Poverty and fear is served up hot everyday of their lives. Survival in the face of incredible hardship is what my students teach me everyday. So I teach them Shackleton and his ultimate lesson, in the end you have to rescue yourself.

Why don't polar bears eat penguins? I give it as a little homework assignment. Its curiosity that I try to teach everyday. The next day the students are talking about it as they walk in. It made me smile. I had succeeded. Most days motivating my students is my biggest battle. They are so used to seeing failure around them they start to become it. We started off the class with the question. Giovany gave the answer. They live in different hoods. I asked him to show us. He walked over to the globe and pointed to the where polar bears live in the North Pole and where penguins lived in the South Pole. Then I hand out the books and we start to talk about a gangster called Shackleton.

My students love the story of Shackleton. They want to talk about surviving. They compare their own struggles to those in the book. They understand it. Together we learn about the Artic landscape, the animals, the ice, the weather and the spirit of a place. Their curiosity is born and I bring in documentaries of the Artic and Antarctic. I plaster the walls with beautiful photographs and I bring in recordings of whales, seals and other animals. After we finish the book comes the last part of the unit: The survival of the last wilderness on earth.

My students don't know what global warning is or means to them but now they care. Now it's become personal. The magical new world they just spent a month in is disappearing and they want to know why and how to stop it. That's where the real teaching comes in. They do reports, find solutions, and write persuasive letters to people in power, to other students, to their parents. They know about 2041 and they know that they can change the world. My students are survivors; they know the power of endurance. I have taught them that if they hope to continue to survive they will need a planet to live on. What better place to start the fight than in the last great wilderness they have come to love.

I want to go to the Antarctic to learn new skills and find better answers for the questions my students ask me. I need the tools to help my students save themselves but most of all I want to bring the Antarctic experience home to them.

Justin Howard *Phone Interview

Sam Houston High School, San Antonio, TX, World Geography teacher, 9th grade

ESSAY:

I lead on the edge of success and failure. Data tells my fellow teachers that our students straddle cracks that separate them economically, ethnically, socially, and physically from students in academically recognized districts. Some fall through that crack, many never think to step across it, and some need to know how. My job is not to ferry them across, but to show them how they can make that step or build that bridge to a future they are proud of. This trip can inspire students in my district to cross that divide, to show them that their lives can become extraordinary if they choose it to be. I can use the leadership skills to coach the young leaders I work with, so they create real change in the environment and their communities.

I want to bring this incredible experience to my district through digital media and the skills I learn into my mentoring classes and conservation club. The amazing multimedia presentation I make from my experiences could be brought back to the entire district and possibly others across the state by way of the internet, in addition to the news media coverage it would gain in our local newspaper. Also, I can only imagine how much more impact it will have to hold our own climate summit within our district after the media presentation to continue the discussion about our climate.

My students need sustainable leadership experience and motivation, which is why I focus on community service and inspiration. The Antarctica trip would allow me to bring the fight against climate change directly into the classroom, spurring my students into action. Many of my students have had few experiences seeing a project to its end. Most of them give up, placing little value in effort. I co-sponsor an organization that landscapes the school to show students the value of sustainable leadership and the changes they can make over time. So far, they have rebuilt a gazebo and landscaped a total of 2,500 square feet of our school, making it more drought tolerant, and persuaded the principle to allow the entire freshman class to take part in their efforts. My club teaches students the value of conserving water and how they can change their own homes to reduce water consumption. Additionally, it teaches students that they can change their school and help the environment. The skills I learn will be put to use in leading these students to continue changing their school, gain self confidence, and learn more about conserving natural resources.

How would a trip to Antarctica and leadership training help me in these endeavors? I can explain how I got into college or how I studied sustainable development in Bolivia, but Antarctica is an impossible journey. Like Mr. Swan's experiences at the poles serve to gain him the respect of his audiences and a platform from which to speak, this trip will make me an inspiration to my students.

Dale Robbins

Wayne H.S., Huber Heights, OH, Science teacher, Grades 9-12

ESSAY:

I would truly invite the opportunity to extend my knowledge of the Last Great Frontier on Earth, and be able to share that experience with my students. I currently use the life experiences gained through a trip to Alaska with my parents many years ago. This first-hand experience of the U.S.'s 49th state was key to spawning my interest in Earth Science, extending my previous love of Space Science.

I am very thankful for the opportunity I had to visit Alaska those many years ago; however, I am even more thankful of the background it gives me beyond mere book learning. In addition, the photographs we took of various geologic formations are invaluable in further enlightening my students of our world and the delicate balance mankind seems intent on tipping.

Certainly, the chance to explore and give back to future generations would be a marvelous tool to add to my teaching strategies. Being able to travel to the Antarctic and perform tasks related to environmental rescue and enlightenment would be a joy. I feel I must relate to you that I have not been an educator all of my adult life. For the first 18 years of adulthood, I was a radio broadcaster. This work encompassed many different facets of the business, from live interviews to ad lib programming, being a disk jockey, and news reporter. My point is this: I can communicate with the public on many levels, am not afraid of speaking before any group or organization, and, perhaps most importantly in getting the word out, I know the news media side of things and how that profession works. I can get the word to those who will not just see it, hear it and forget it, but do something about this most important task.

Beyond my personal life experiences, beyond my teaching and broadcasting experiences, I think I offer one other important quality. I am an idea person, and am willing and able to pursue grants and other funding methods of getting the most from an education or publicity dollar. I have been involved in writing several grants to provide my school with additional materials--ones which would not have been possible any other way. One of these provided the means by which children with physical disabilities could study and take part in science activities right alongside their other classmates. Most recently, I successfully wrote a grant which provided my school with a Weather Bug installation, so that we may keep a closer watch on the climate in our locale.

My learning did not end with my MS Ed. Degree. I have participated in workshops involving changing the way science is presented in our classes. In addition, I have attended forums to help promote more hands-on activities for science students.

I would welcome the chance to extend my learning and growth, and therefore become more for my students! My district encourages professional growth; such a trip presents no barriers.

Karen Billings

Oklahoma School of Science and Math, Oklahoma City, OK, Humanities teacher, 12th grade

ESSAY:

Antarctica is a microcosm that encapsulates 21st Century global issues facing the next generation of leaders along with the experimental political processes that might be key to resolving them. There, in the Antarctic Treaty System, international efforts preserve nature, address far-reaching ecological concerns, maintain peace, supersede national interests with international ones, rely on free access to information and common goals. Beyond the urgent ecological imperative evident as the ice melts in the polar zones, new paradigms of cooperative enterprises beyond national interests practiced in the Antarctica Treaties suggest possibilities of a world at peace, a world of responsible energy use, a world that is sustainable, a world of shared goals. The last continent is the testing ground for international cooperation that the whole planet is dependent on for survival.

As a humanities teacher at a magnet high school designed to attract future scientists and world changers, I teach the students who must address the dilemmas of 2041 and find real life practical solutions for the world as it is now, with its three tiers of development, its competing national interests, and its escalating carbon footprints. I would like to inspire my students to respond aggressively to the 2041 challenges. I have found that as I learn, I am able to teach. When I am passionate, my teaching engages the students. When I am inspired, students become inspired. Immersion in travel provides that fuller appreciation of other places then taken back to my students. The Antarctica 2041 Teachers' Contest provides the opportunity for one teacher to explore the rarely visited last wilderness, and to prepare to sound the alarm calling students to conscientious global ecosystem management and cooperative international relations.

I would like to be the teacher empowered to raise that cry.

I am fascinated with the prospect of such an expedition, all my educational interests peaked. Like the expedition, the issues facing our shrinking globe require interdisciplinary approaches. The solution finders and implementers must understand the political and social issues as well as the scientific. Never before has there been such need for budding scientists to understand our political world. Never before has it been so important for future policy makers to understand science.

Bringing the skills back to the classroom will include pre-departure lectures and background readings for my students over the ecological issues facing Antarctica and the Antarctica Treaty System to prepare them to meaningfully follow my blog while on the journey. Upon returning, I plan to deliver an hour-long all-school presentation over my experiences. In the spring, students would read Antarctica 2041 as part of the literature component of the Senior Humanities course. Mini-research assignments over related ecological, scientific, political, and historical topics followed by student presentations and small group position papers would complete the unit. The 21st Century discussions held during the last week of class provide the forum for students to share their concerns, opinions, and solutions, leaving them with the important 2041 challenges and opportunities as they go off to universities across the country.

Mary Patterson

Hamilton Middle School Cy-Fair ISD, Cypress, TX, Science Dept. Chair, Grades 6-8

ESSAY:

I have taught science passionately for the past 25 years. However, it was after a recent opportunity as a NOAA Teacher at Sea 2009 aboard the Rainier in the Pavlof Islands of Alaska, that I truly became aware of the life of a scientist in the field and the wondrous beauty of the Arctic. Like Robert Swan, I would love to compare and contrast these two areas of unspoilt wilderness and fragile ecosystems.

Analysis of current data indicates that our students are struggling to make connections to the real world of science. Today, fewer students seek advanced level courses in science and fail to see science as a career choice. I need to change that! I need to make a difference! My vision is to take my students with me on an ultimate field trip- vicariously using modern technology. I want my students to be tuned in and turned on by science! This opportunity would augment my content knowledge and help me become a more knowledgeable teacher. More importantly, to have my students see science as a possible career choice, new lessons on career opportunities would be developed upon my return and would be based on interviews with the crew.

The world has become our community. My students today are from all parts of the world. I look upon this opportunity as one, which will enable me to illustrate the idea that we are a community of scientists, sharing knowledge for the good of the world as observed when we visit the King George Island multinational stations. In the words of Margaret Mead, "As the traveler who has once been from home is wiser than he who has never left his own doorstep, so a knowledge of one other culture should sharpen our ability to scrutinize more steadily, to appreciate more lovingly, our own.

Houston is known as an energy capital of the world and many of my students have parents associated with the energy industry. I believe I can help my students become more aware of their environmental impact after sharing experiences from Antarctica. I can help them see a more balanced side and inspire them to action for how they can both individually and collectively make a positive difference to their world. If I can capture and inspire my student's interest while they are in middle school, the more likely it will impact decisions they make later about energy, the environment and ultimately Antarctica.

My recent experience as a NOAA Teacher at Sea illustrates my ability to live at sea for three weeks and be a part of the research team; abilities I hope that will enable me to be a productive member of the 2041 International Antarctic Treaty Expedition. I encourage my students to, Reach for the stars and take advantage of every opportunity, even if it seems like they may not stand a chance of getting it. I think my students will be proud of me for reaching for the icebergs!

Janet Coon

East Middle School, Sioux City, IA, Life Science teacher, 7th Grade

ESSAY:

Time is of the essence to create engaging opportunities for the young people of our world to collaborate, inquire, investigate, and explore solutions for the future of our planet. Environmental sustainability extends beyond the necessity of preserving and bettering our planet; it is far reaching into global economics and the state of world peace. I believe it is within our power to create the positive changes needed to halt climate change and the consequences associated with it. Joseph Newton stated, "We cannot tell what may happen to us in the strange medley of life. But we can decide what happens in us, how we take it, what we do with it-and that is what really counts in the end.

I am passionate about working with youth. As a life science instructor, I bring learning to life for my students and their families. My goal is to engage them in relevant, real-life learning opportunities. Each student has the potential to discover what it is that they are truly passionate about in life and to become a life-long learner. It is my responsibility to provide each of them a caring, safe, engaging, creative environment in which to learn about the sciences, and also about our ever changing world, humanity, and themselves.

There is no better way to learn than from first-hand experiences. It would be an honor to participate in the 2041 Expedition with Mr. Swan to Antarctica. My students, as well as their families and the community as a whole would travel with me in real-time to Antarctica through my blog and wiki conversations. I would also document my experience through photos and videos. My classes would study the past expeditions of Swan and the geography and geology of the land, as well as climate and weather patterns of the area prior to and following the journey.

I would engage my students in interactive investigations throughout the experience. Upon my return, my students would be involved in differentiated activities based on what I have gathered from the expedition. Students would also create inquiry-based investigations on their own after gathering major concepts on the status of the Polar Regions and life that inhabits the area. We would then look at the impact of climate change on Iowa and other areas. Students would then be encouraged to collaborate with students from the US and possibly Argentina and Costa Rica. Students will be given the opportunity to actively engage in 21st century skills and utilize technology, problem-solving, and collaboration to think outside-the-box and work towards a positive solution.

I have witnessed first hand, the positive changes that can take place when young people are given a situation that requires real-life work. My students recently created a produce garden to help feed the hungry and a green space. Given the opportunity to be valued as contributing citizens of schools, communities, and the world, our youth can move forward to be the innovators, problem-solvers, explorers, and motivators of tomorrow. I am passionate about what I do, and I would love the chance to explore and learn with my students and their families on this journey.

Philip Medina

Robert C. Murphy Junior High School, Stony Brook, NY, Science teacher, 8th & 9th Grades

ESSAY:

A trip to The Last Wilderness is a once-in-a lifetime opportunity to strengthen the message that I have been delivering to my students and colleagues for years: we are the stewards of our planet. I am a dedicated Earth Science teacher who will use this expedition to share my passion for learning with students in my classroom and many others I reach through more modern forms of media.

My classroom is very active and my lessons are constantly evolving. I regularly demonstrate and field-test new technology in my classroom, such as smart boards, probe hardware, and wireless testing systems. When the technology isn't available for what I want to do, I develop it myself. I created a system for projecting three-dimensional images in the middle of my classroom for astronomy lessons. I also made the first environmental simulator for the classroom that - at the flip of a switch - can reproduce a storm complete with wind, rain, fog and flashing lightning.

I'm proud to have published an Earth Science review book entitled *Homework Helpers Earth Science* but I've reached many more students through my website and by posting my videos online. I selflessly share my information with teachers and students alike. My educational YouTube videos have been seen by close to half a million people. (Search for "mrsciguy" but please don't watch me doing the "Evolution of Dance" for a school benefit!). I maintain a comprehensive Earth Science web site (mrsciguy.com) that I created over fifteen years ago, a time when most people didn't even have an e-mail address. Through my web page I correspond with students and teachers from all over the world.

My students quickly learn that my passion for the Earth and reducing my footprint is genuine. I was the first teacher in my building to establish paper and plastic recycling in the classroom. I bike to work, and drive a hybrid when I can't bike. I have a solar electric power system for my home.

Each summer I go on a Great Adventure, such as trekking through the mountains of Colorado or mountain biking through the sweltering Mojave Desert. For each trip, I bring back pictures and video so my students can share what I've experienced. It took two trips to Florida, but I have great video of a night-time space shuttle launch from the NASA VIP stands only three miles away. I have also earned the rank of Kung Fu master two years ago and continue to teach martial arts so I would be comfortable with any physical challenges that may arise on the expedition.

As you can see, I am a dynamic, innovative, collaborative and adventurous teacher with a true love of the Earth. If I'm lucky enough to be chosen for the trip to Antarctica, sharing my experiences with my students and colleagues through words, pictures and videos will not just be a requirement of the contest, it will be a profound pleasure.

Thank you for taking the time to consider me.

James M. Brown

Sand Creek Middle School, South Colonie Central School District 329, Albany, NY, Math and Science teacher, fifth and Sixth grade

ESSAY:

I want to visit Antarctica to increase my networking and bring to life what is taught to students. Expanding my networking will broaden my horizons as well as increase the number of people I can utilize to help me improve educational outcomes for students. By experiencing Antarctica first hand, I will be better able to bring my curriculum to life.

My experiences qualify me for this program. Over the course of my vast experience participating in and providing professional development, I have learned from participants. I have a record of sharing what I've learned with other teachers helping them bring best educational practices into their lessons as well as motivating students to be empowered through the learning process. Lastly, I am also Energy Manger/Educator for our district, working with a wide and diverse community promoting energy conservation, reducing consumption by 27%.

There are several avenues to share my Antarctica experiences. First is through time specifically built into our schedule for teacher collaboration on a building and district level. Additionally, as Energy Manager/Educator, I go to all district buildings to encourage and teach about conservation. In this capacity I work with many different audiences, and will use this opportunity to convey my experiences. For our district's newsletter, I write quarterly articles in which I may offer insight and perspective born out of this opportunity. Lastly, I work with teachers beyond my district, and will share with them as well.

Outside of these avenues, I will impart my experiences through student work. Each year students complete an interdisciplinary Language Arts/Science project on biomes. Language arts goals are for students to learn how to take notes, write a research paper from their notes, and to make a presentation. Science goals are for students to learn about biomes, plant and animal adaptations, and how man has hurt and helped various biomes. An even larger goal is to motivate students to use this knowledge to take action to help the environment. I will incorporate my Antarctica experience into, and expand upon this interdisciplinary project. My experience will be used to make a model presentation for students to see before beginning their own projects.

Currently a commercially available video on Antarctica is shown to start this project. Last year I worked with an intern on how to videotape, edit, and create digital videos. Using this information I will create my own video which I believe will prove to be infinitely more engaging and authentic. Where video is not practical, I will use a voice recorder to document while facts are fresh. This DVD will be shared with faculty and students.

Sharing my experiences takes learning out of the textbook and into real life. The fact that students and colleagues know me and will hear my own experiences increases the likelihood that they will be interested in, and make a connection to, the information. My travel to Antarctica is essential because my experiences are what give me credibility. Credibility helps me motivate others to take action.

Anne Murray Allen

Willamette University, Atkinson Graduate School of Management, Salem, OR

ESSAY:

I want to experience first hand the most phenomenal place and long-standing agreement on the planet – Antarctica and its historic treaty. What makes this so amazing to me is that this agreement has been sustained over centuries and, if truly understood by ourselves and our children, will continue long into our future. Upon return, I want to write about it, making a case study available to university students and students inside organizations.

I am a contributing faculty member at Willamette University, located in Oregon, USA. I am also the director for the certificate programs offered through Willamette's graduate school of management. Willamette is a small, non-profit, private university with a national reputation for sustainability. Although small, we are mighty. Proudly, the graduate school of management is actually the largest accredited MBA program in the state and half the early career students are international. Over the last several years the National Wildlife Federation, the Sierra Club, Oregon 100 and others have recognized us for our sustainability orientation and activities. My role is to create certificate programs for not only the graduate students, but also the broader public, private, and not-for-profit industry sectors in the Pacific Northwest. A program I created and piloted last year, entitled "Sustainable Enterprise Certificate" enrolled law and management graduate students from not only Willamette, but also another university. They studied alongside people from public, private, and non-profit organizations. It was an incredible mix of people and they had such enthusiasm for figuring out *together* how to integrate knowledge about sustainability and move into action planning.

I want to expand this program and offer others that emphasize ethical and sustainable leadership lessons from Antarctica and elsewhere. Equally important is the power and practice of dialogue and how people with diverse interests come together to create extraordinary value. I've always been a student of this phenomenon and now more than ever we need to be creating extraordinary results conserving our planet and our collective well-being in the process.

My intention joining this trip would be to create a case study about Antarctica to be used in our graduate programs and offered to other universities too. This case study would address how biological, social, and economic well-being is created globally through the visionary Antarctica Treaty. Designing the courses around this case study, students would learn to integrate all these elements as a *system* of sustainability, as a method for thriving into our collective future. My experience tells me these young students are already emotionally committed and now want to make a difference through studying real world examples – examples they can emulate and be inspired by in taking the next steps as leaders in their chosen lives and careers.

If successful, I will return from this trip with new collaborators, rich experience, and the ability to create a documented case study that will not only help Antarctica continue to be conserved but will also serve as a valuable, inspirational tool for educating students on how the triple bottom line *really* works.

Kelly Rueckheim

Wonewoc Center Schools, Wonewoc, WI, Science teacher, 9-12

ESSAY:

If I were selected to participate in the Antarctica 2041 expedition, it would be an amazing experience for both me and my students. My plan upon my return would be to share my experience with the students and the staff at a school assembly. My desire would be to use the skills that I would learn in two ways.

I would first use these skills to develop an action plan for our district. Our science department has recently begun talking about ways to use green energy to power our school. Getting the opportunity to work with other teachers and experts in the extraordinary setting of Antarctica would be a springboard for the development of an action plan. I would work hard to show our community the issues facing Antarctica in 2041 will be many of the same issues we will be dealing with in Wisconsin in 2041. By doing so, I hope to affect change in our school district and our community. My desire is to teach our community that the choices we make today affect the entire planet. I believe strongly in Mr. Swan's idea that nature shouldn't be a cause we are fighting for, but instead it is the totality of life. Our most basic needs are met by the environments that we as a species call home. Without these environments, we would be in serious trouble.

I teach in a small, rural school district. We are lucky enough to have an outdoor learning area that I maintain with help from my students each year. It provides me with an outdoor classroom to teach my students about our local ecosystems and landscapes. It gives me an opportunity to incorporate many hands-on activities with students. I am an avid birder, and my outdoor classroom allows me to share this passion and many other exciting areas of study with the entire school district.

A second way I could use the skills I would bring back from Antarctica would be to develop an environmental conscience within our student body through exploration of the unknown. The school outdoor learning area provides many wonderful opportunities for students to explore and learn about new and exciting ideas. Using the skills I learn in Antarctica, I hope to inspire a lifelong curiosity.

It would be an honor for me to participate in the Antarctica 2041 expedition. I love to travel and explore new places. I am and always have been passionate about it. It is truly a dream of mine to visit Antarctica. In my mind, I imagine what it would be like to experience such a pristine and unique place. Every new adventure reminds me that what I share with my students in the classroom is real, not just pictures in a book or words on a page. I return to school each fall and my passion for adventure turns into a passion for sharing. These experiences and places have made me who I am as a person and a teacher.